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ABSTRACT

This report presents and compares the results of the first and second art assessments conducted by the National Assessment of Educational Progress (NAEP) in 1974-75 and 1978-79. The achievement and attitudes of approximately 7,500 9-year-olds, 11,000 13-year-olds, and 13,500 17-year-olds were surveyed. The report consists of an introduction to the studies and six chapters. Major findings are discussed and survey information about the amount and kind of art experiences young Americans are having in and out of school is presented. The extent to which and the ways in which students value art are examined along with knowledge about art history and styles. How young people perceive, describe, analyze, and judge art is also investigated in detail. Results of a series of exercises requiring design and drawing skills are presented in a final chapter. Encouraging findings include the following. Nine-year olds' performance on the second assessment stayed much the same as it was in the first assessment. Museum visitation has increased for 9- and 13-year olds. Nineteen percent of the 17-year-olds and 15% of the 13-year-olds succeeded in putting expressive content into their drawings of angry people. There were also findings which were troublesome. Some examples include the following. Thirteen-year-olds declined 2.2 percentage points between assessments. Seventeen-year-olds declined 1.9 points between assessments. In general, tolerance for nonconventional art decreased considerably between 1974 and 1979. Appendix material includes art objectives and scoring guides for the drawing exercises. Primary type of information provided by report: Results (Selective) (Change). (Author/RM)

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Art and Young Americans, 1974-79:

Results From The Second National Art Assessment

Report No. 10-A-01

by the
National Assessment of Educational Progress

Education Commission of the States
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December 1981

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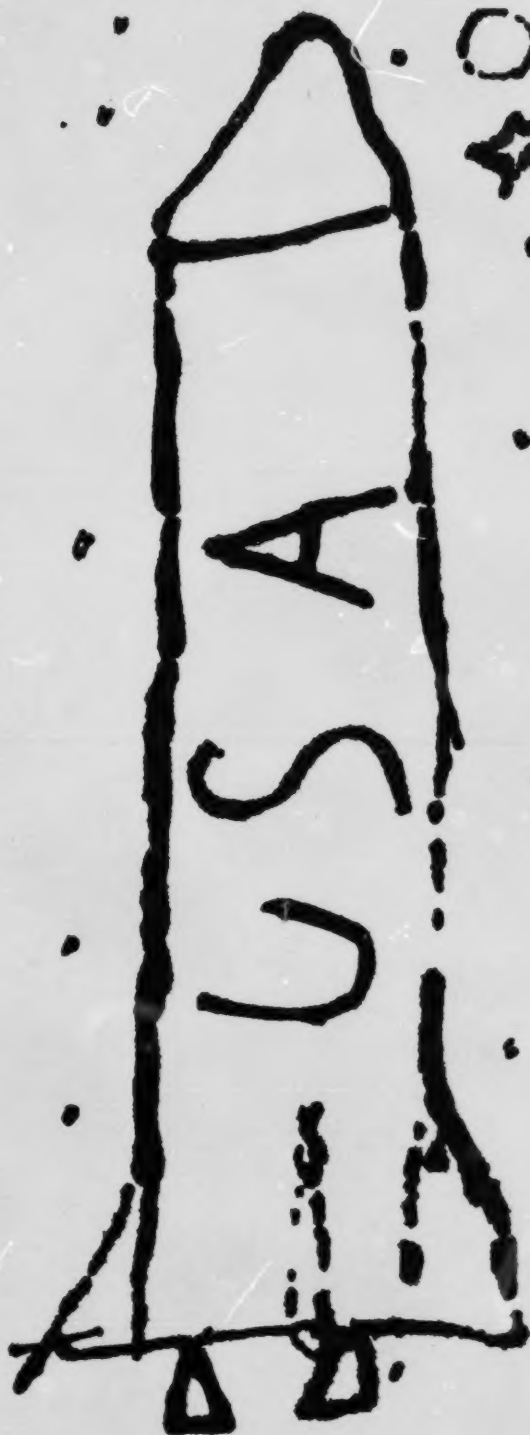
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Foreword



When the U.S. Office of Education was chartered in 1867, one charge to its commissioners was to determine the nation's progress in education. The National Assessment of Educational Progress (NAEP) was initiated a century later to address, in a systematic way, that charge.

Since 1969, the National Assessment has gathered information about levels of educational achievement across the country and reported its findings to the nation. It has surveyed the attainments of 9-, 13- and 17-year-olds and sometimes adults in art, career and occupational development, citizenship, literature, mathematics, music, reading, science, social studies and writing. All areas except career and occupational development have been periodically reassessed in order to detect any important changes. To date, National Assessment has interviewed and tested more than 1,000,000 young Americans.

Learning-area assessments evolve from a consensus process. Each assessment is the product of several years of work by a great many educators, scholars and lay persons from all over the nation. Initially, these people design objectives for each subject area, proposing general goals they feel Americans should be achieving in the course of their education. After careful reviews, these objectives are given to exercise (item) writers, whose task it is to create measurement instruments appropriate to the objectives.

When the exercises have passed extensive reviews by subject-matter specialists, measurement experts and lay persons, they are administered to probability samples. The people who compose these samples are chosen in such a way that the results of their assessment can be generalized to an entire national population. That is, on the basis of the performance of about 2,500 9-year-olds on a given exercise, we can make generalizations about the probable performance of all 9-year-olds in the nation.

After assessment data have been collected, scored and analyzed, the National Assessment publishes reports and disseminates the results as widely as possible. Not all exercises are released for publication. Because NAEP will readminister some of the same exercises in the future to determine whether the performance levels of Americans have increased, remained stable or decreased, it is essential that they not be released in order to preserve the integrity of the study.



Acknowledgments



Many organizations and individuals have made substantial contributions to the art assessments. Not the least of those to be gratefully acknowledged are the administrators, teachers and students who cooperated so generously during the collection of the data.

Special acknowledgment must go to the many art educators and specialists who provided their expertise in the development, review and selection of the assessment objectives and exercises. Development of the art assessment was coordinated by Sarah Knight.

Administration of the art assessment was conducted by the Research Triangle Institute, Raleigh, North Carolina. Scoring and processing were carried out by Westinghouse Information Services, Iowa City, Iowa, and by the National Assessment staff.

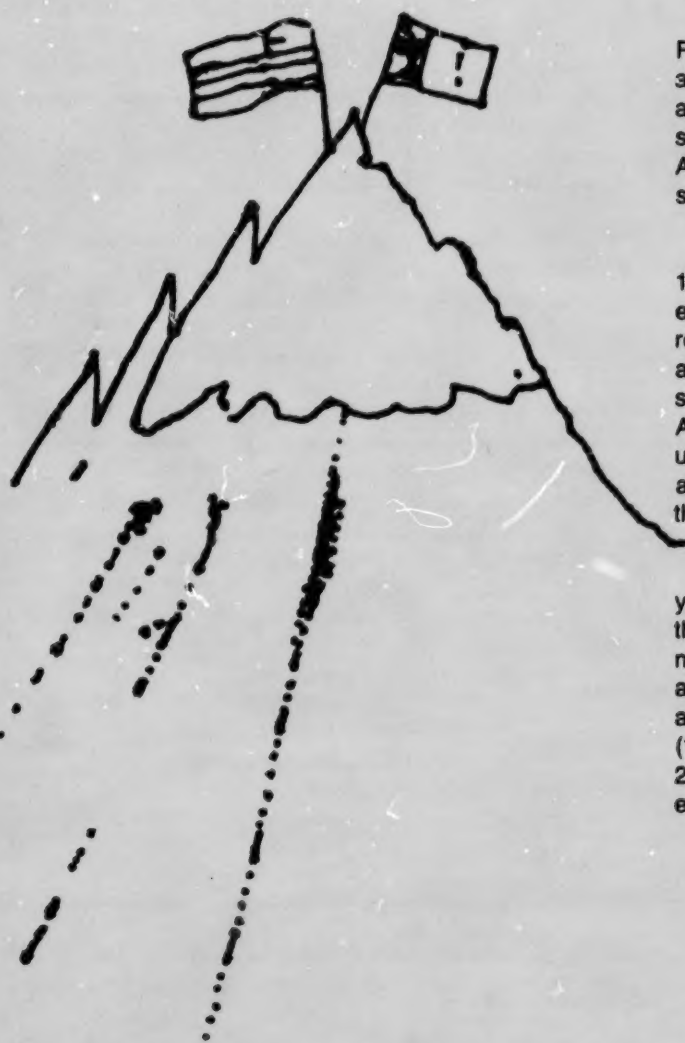
The actual preparation of this report was a collaborative effort of the National Assessment staff and art education consultants. Special thanks must go to the following people: Donald T. Searls for information on sampling and data analysis; Marci Reser and Deborah Houy for production; Pat Kelly for design; Sarah Knight and Donald Phillips for scoring and statistical analyses; and Lynn Gisi and Ava Powell for technical support. The report was written by Brent Wilson, Pennsylvania State University; Ronald Silverman, California State University, Los Angeles; Laura Chapman, Cincinnati, Ohio; Rexford Brown, National Assessment; and Donald Phillips, National Assessment.



Roy Forbes
Director

Introduction

General Background



The National Assessment of Educational Progress (NAEP) has completed two assessments of art, the first conducted in 1974-75 and the second in 1978-79. Each assessment surveyed the achievement and attitudes of American 9-, 13- and 17-year-olds, using a deeply stratified, multistage probability sample design.

To measure changes in performance between 1974-75 and 1978-79, approximately half of the exercises assessed in the first assessment were reassessed in the second under almost identical administrative conditions. To measure the status of art achievement in 1978-79, National Assessment consultants reviewed the objectives used in the first assessment and developed additional exercises to provide wider coverage of these objectives.¹

Approximately 7,500 9-year-olds, 11,000 13-year-olds and 13,500 17-year-olds participated in the 1978-79 art assessment. Because there were more art exercises for 13-year-olds than available assessment space, six exercises were held and administered in the next year's assessment (1979-80). During the 1979-80 assessment, 2,749 13-year-olds responded to these six art exercises.

¹ Although National Assessment traditionally revises objectives prior to an assessment, a shortage of funds and time prohibited complete redevelopment of the art objectives. Previous art objectives were reviewed by consultants and found to be usable with some shifts in emphasis.

In 1978-79 three exercise booklets for 9-year-olds, four booklets for 13-year-olds and five booklets for 17-year-olds contained art exercises. In the 1979-80 assessment, only one item booklet for 13-year-olds included art items. Since National Assessment reports results for groups of students, not individuals, it is not necessary for each student to respond to every item (exercise).² Each respondent completed only one item booklet of about 45 minutes in length. Between 2,400 and 2,800 students responded to each booklet.

In both the 1974-75 and the 1978-79 assessments, 13-year-olds were assessed in October through December, 9-year-olds in January and February, and 17-year-olds in March and April. Thus, the amount of school experience for each age group was approximately the same in each assessment.

The exercises for each assessment were administered by a professional data collection staff to minimize the burden on participating schools and to maximize the uniformity of assessment conditions. Instructions and items were recorded on a paced audio tape and played back to students to reduce the potential effect of reading difficulties and to ensure that all students moved through the packages at the same speed.

Scoring

Scoring and computer recording of data were contracted to Westinghouse Information Services, Iowa City, Iowa. While most of the exercises in the 1978-79 art assessment were multiple-choice, several exercises were open-

ended. Responses to multiple-choice exercises were read directly from the booklets by optical scanning machines. The scoring contractor employed a special staff to hand score the open-ended exercises. Scorers were responsible for categorizing responses, using the scoring guides for open-ended exercises that defined categories of acceptable and unacceptable responses. They then coded this information into ovals that could be read by optical scanning machines.

Because of the complexity and expense of art scoring, the six open-ended art exercises scheduled to be scored following the second (1978-79) art assessment were not scored until fall 1980. All of these exercises had been used in the 1974-75 assessment as well as during the 1978-79 assessment. Responses from the first assessment had been held unscored so that responses from both assessments could be scored at the same time by the same scorers. Similarly, some open-ended unreleased items from the 1978-79 assessment will remain unscored so that responses can be scored with responses from a subsequent assessment.

The art exercises were scored using guides developed by art consultants with field trial responses. These guides were edited and revised by National Assessment staff.

Items were scored by eight scorers organized into two teams of four. In addition, an artist/consultant worked with both teams as the art authority on scoring questions and did some scoring.

To be sure that the art hand scoring was reliable across the scoring period and across scorers, National Assessment asked Westinghouse Information Services to perform two quality control studies. In one study, a sample of about 3% of the responses to one of the six open-ended questions was drawn during each week of

² National Assessment uses the term "exercise" to mean an assessment item. The terms "exercise" and "item" are used interchangeably in this report.

scoring. Each of these responses was scored by two scorers who were normally assigned to score the item. The two scorers independently rated each response and their scores were then compared. The overall pairwise percent of agreement was 94.6%.

In the second quality control study, which began near the beginning of the scoring period, scorers scored a sample set of responses; they then rescored the same set of exercises at the conclusion of the scoring period. The two scores were compared and pairwise percents of agreement were calculated, this time within scorer and across time. Team 1 averaged 92.5% and Team 2 averaged 95.2% agreement.

Measures of Achievement Used in This Report

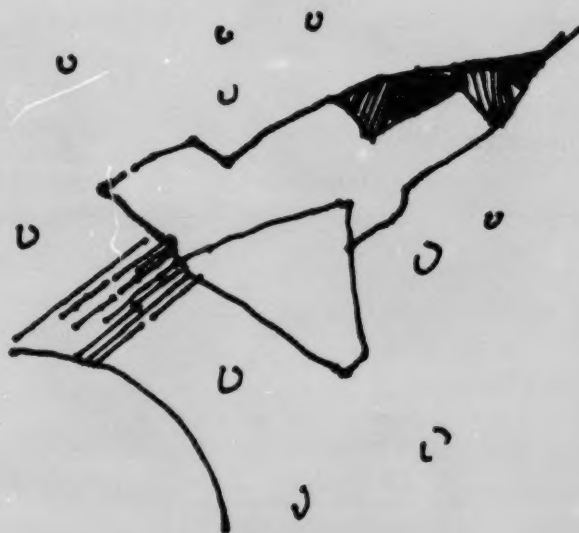
The basic measure of achievement reported by National Assessment is the percentage of students responding acceptably to a given item. This percentage is an estimate of the percentage of 9-, 13- or 17-year-olds who would respond acceptably to a given item if every 9-, 13- or 17-year-old in the country were assessed.

In addition to providing results on individual items, National Assessment reports the average performance across groups of similar items for the learning area as a whole, for particular objectives or subobjectives, etc. This mean, or arithmetic average, of the estimates of performance on a group of items is called the mean percentage acceptable. The exercises included in the calculation of a mean percentage are usually located in several exercise booklets, and the same students do not take them all. Thus, the mean percentage should not be construed as an average test score.

To present a general picture of changes in achievement, National Assessment describes the gains and losses on a group of exercises in terms of the differences in the average percentages of acceptable responses.

Unless the exercises summarized in the mean percentages of acceptable responses are identical, the means of one age group should not be compared with the means of another, since their values reflect both the choice of exercises and the performance of the students. When only a few exercises are summarized by a mean, one should be especially cautious in interpreting results, since a small set of exercises might not adequately cover the wide range of potential behaviors included under a given objective or subobjective.

In addition to providing national results, National Assessment reports the achievement of various subpopulations of interest. Groups are defined by region of the country, sex, race/ethnicity, size of community lived in, type of community lived in, grade and level of parents' education. Definitions of the groups follow:



Region

The country has been divided into four regions: Northeast, Southeast, Central and West. States included in each region are shown on the following map.



Sex

Results are reported for males and females.

Race/Ethnicity

Results are presented for blacks, whites and Hispanics. (Because of a small sample size, only average results for Hispanics can be reported by National Assessment.)

Level of Parental Education

National Assessment defines three categories of parental-education levels, based on students' reports. These categories are: (1) those whose parents did not graduate from high school, (2) those who have at least one parent who graduated from high school and (3) those who have at least one parent who has had some post-high-school education.

Type of Community

Communities in this category are defined by an occupational profile of the area served by a school as well as by the size of the community in which the school is located. This is the only reporting variable that excludes a large number of respondents. About two-thirds do not fall into the categories listed below. Results for the remaining two-thirds are not reported since their performance is similar to that of the nation.

Advantaged-urban (high-metro) communities. Students in this group attend schools in or around cities having a population greater than 200,000 where a high proportion of the residents are in professional or managerial positions.

Disadvantaged-urban (low-metro) communities. Students in this group attend schools in or around cities having a population greater than 200,000 where a relatively high proportion of the residents are on welfare or are not regularly employed.

Rural communities. Students in this group attend schools in areas with a population under 10,000 where many of the residents are farmers or farm workers.

Size of Community

Big cities. Students in this group attend schools within the city limits of cities having a population over 200,000.

Fringes around big cities. Students in this group attend schools within metropolitan areas served by cities having a population greater than 200,000 but outside the city limits.

Medium cities. Students in this group attend schools in cities having a population between 25,000 and 200,000, not classified in the fringes-around-big-cities category.



Small places. Students in this group attend schools in communities having a population less than 25,000, not classified in the fringes-around-big-cities category.

Grade in School

Results are reported for 9-year-olds in grade 3 or 4; 13-year-olds in grade 7 or 8; and 17-year-olds in grade 10, 11 or 12.

Visit Art Museums

Results are reported for 9-, 13- and 17-year-old respondents who indicate having never visited an art museum, having visited an art museum at least once, and having visited an art museum five or more times.

Art Taught

Results are reported for 9-, 13- and 17-year-olds whose principals indicate that their schools offered at least one art class and for those whose principals did not report offering an art class.

Do You Collect Art

Age 13 results are reported for students who indicate that they collect no art, one type and two or more types of art. Seventeen-year-olds' results are reported for those who indicate collecting none, one type, two types and three or more types of art.

What Kinds of Artwork Do You Do

Age 9 results are reported for those who indicate they do no art, one or two, and three or four types of art outside of school. Ages 13 and 17 results are reported for those who indicate doing none, one or two, three or four, and from five to ten types of art outside of school.

Art Classes Taken

Age 13 results are reported for those who indicate they took no art classes, one and two art classes. Age 17 results are reported for those who indicated they took zero, one, two or three, and four to six art classes.

Home Environment

To develop general estimates of home environment, NAEP asks students which of the following they have at home: newspapers received regularly; magazines received regularly; more than 25 books; an encyclopedia. "Low" home environment refers to students who answered that they had fewer than three of these things at home. "High" home environment refers to students who said they had all four of these things at home.

Estimating Variability in Achievement Measures

National Assessment uses a national probability sample at each age level to estimate the proportion of people who would complete an exercise in a certain way. The particular sample selected is one of a large number of all possible samples of the same size that could have been selected with the same sample design. Since an achievement measure computed from each of the possible samples would differ from one sample to another, the standard error of this statistic is used as a measure of the sampling variability among achievement measures from all possible samples.

The standard error provides an estimate of sampling reliability for the achievement measures used by National Assessment. It is comprised of sampling error and other random error associated with the assessment of a specific item or set of items. Random error includes all possible nonsystematic error associated with administering specific exercises to specific students in specific situations. For open-ended items, random differences among scorers are also included in the standard errors.

National Assessment has adhered to a convention whereby differences between statistics are designated as statistically significant at the .05 level of significance. That is, differences in performance between assessment years or between a reporting group and the nation are highlighted with asterisks *only* if they are at least twice as large as their standard error. Differences this large would occur by chance in fewer than 5% of all possible replications of the sampling and data collection procedures for any particular reporting group or national estimate.

Further and more detailed information about the art assessments appears in *Procedural Handbook: 1978-79 Art Assessment* (1981), available from the National Assessment of Educational Progress.

Organization of This Report

This report is designed to provide a quick overview of findings and their implications (Chapter 1), followed by more detailed discussion of results grouped according to major art objectives. Chapter 2 presents information about how much experience students have had with art either in school or outside of school. Chapter 3 presents results for those exercises assessing the extent to which students value art and Chapter 4 presents information about their art knowledge. Chapter 5 deals with the various ways students respond to different kinds of art and Chapter 6 presents the results of exercises assessing design and drawing skills. The appendixes include materials such as art objectives, scoring guides and other information necessary for understanding the results presented in the text.

A Note About Interpretations and Value Judgments

Unlike other National Assessment reports that limit interpretive remarks to a particular chapter, this report includes interpretive remarks and value judgments throughout, due to the nature of the material. These comments represent the best judgments of the art consultants—Laura Chapman, Ronald Silverman and Brent Wilson—who are solely responsible for them. They do not necessarily reflect the views of the National Assessment of Educational Progress, the Education Commission of the States or the National Institute of Education.

Chapter 1

Major Findings and Their Implications



In August 1981, the National Assessment asked three distinguished art educators—Laura Chapman, Ronald Silverman and Brent Wilson—to assist staff in writing a report about the NAEP findings in art and to discuss the implications of those findings for educational policy and practice. This chapter presents the major findings from their point of view, as well as their reflections about the meaning of these results and what can be done to improve knowledge of and sensitivity to the arts in America's schools. Since every assessment has its positive and negative results, we have organized the major findings in terms of the degree to which the results were viewed as encouraging or troubling by these art educators. The reader may not, of course, agree with them; they do not always agree with each other. However, our intention in using this format is as much to stimulate discussion of the results as to present them.

Encouraging Findings

Changes

Nine-year-olds' performance on the 1978-79 art assessment stayed much the same as it was in the 1974-75 assessment (see Table 1-1). Their mean percentage of success was 33.9% in the first assessment and 37.6% in the second.

Museum visitation has increased for 9- and 13-year-olds. In 1978-79, 69% of the 9-year-olds said they had visited an art museum at least once, up over 7 points from the first assessment. Seventy-eight percent of the 13-year-olds (up 5%) and 82% of the 17-year-olds (up 1%) also said they had visited a museum at least once (see Chapter 2).

Nineteen percent of the 17-year-olds and 15% of the 13-year-olds succeeded in putting expressive content into their drawings of angry people. These figures represent a statistically significant 3.3% increase for 17-year-olds and a nonsignificant 1.4% improvement for the younger teenagers (see Chapter 6).

Group Results: Change

Nine-year-olds in several groups (see Introduction for definitions) improved between assessments at a faster rate than the nation. Western students' mean percentage rose 2.4 points and students living in small towns improved 2.0 points. The rest of the groups performed like the national population (Exhibit 1-1).

At age 13, Northeastern, Western and Hispanic students did not show significant declines between assessments, even though the national population did (Exhibit 1-2).

At age 17, Western and Southeastern students, blacks and Hispanic students did not register significant declines (Exhibit 1-3).

Group Results: General

As Table 1-2 reveals, performance in 1978-79 was higher than the national level for certain groups at all three ages. Socioeconomic factors were clearly associated with performance and so was degree of participation in art activities. Those students whose parents have been educated beyond high school; those whose homes contain books, magazines, newspapers and encyclopedias; those who attend schools in advantaged-urban areas; those who visit art museums often, engage in many art and craft activities or take an above average number of art classes—all perform better than the national population.

Black youngsters from homes that have books, magazines, newspapers and an encyclopedia performed at the same level as the national population.

Art education appears to have a positive relationship to design skills. Those students who said they had taken 4-6 art courses performed considerably higher than other students on the drawing exercises that called for design.

General Results

Students can recognize features of works, themes, and main ideas in artworks when they are given multiple-choice questions about them. And skill in this area increases with age (see Chapter 5).

About half of the 9-year-olds, one-third of the 13-year-olds and half of the 17-year-olds were able to provide some acceptable justification for their aesthetic judgments (see Chapter 5).

There is a steady increase in ability to create imaginative designs from age to age.

Troubling Findings

Changes

Thirteen-year-olds declined 2.2 percentage points between assessments (see Table 1-1). The areas in which their decline was greatest were valuing (-3.3%) and knowledge about art (-2.7%).

Seventeen-year-olds declined 1.9 points between assessments (see Table 1-1). The area in which their decline was greatest (-4.0) was valuing.

In general, tolerance for nonconventional photographs, architecture, sculpture, paintings and drawings decreased considerably between 1974 and 1979. Works closer to conventional taste (e.g., Michelangelo's *Moses*, modern furniture and realistic paintings) did not decline.

Positive attitudes toward unusual art appear to be held by a minority of students at all ages (see Chapter 3).

In 1978-79, about 30% of the 17-year-olds and 22% of the 13-year-olds showed potential commercial design skills by creating acceptable cereal box designs. This represented a 6 percentage point decline for the younger students (see Chapter 6).





Group Results: Change

Although 13-year-olds nationally declined 2.2 percentage points, 13-year-olds in the Central states declined 4.4 points; those living in disadvantaged-urban areas declined 4.1 points; and those living in advantaged-urban areas declined 4.3 points (Exhibit 1-2).

Although the national decline for 17-year-olds was 1.9 percentage points, it was 3.3 points for students in the Central states and 6.8 points for students living in rural areas (Exhibit 1-3).

Group Results: General

Table 1-2 demonstrates that students in certain socioeconomic groups, students who live in certain areas and students who have had little exposure to art perform below the national population at all ages. In some cases, the difference between a group and the nation becomes greater as the students grow older.

Black 9- and 13-year-olds are not closing the gap between themselves and the nation as they have been doing in reading and writing.

Although students who have taken many art classes do somewhat better than others, on the average, their advantage is primarily on the set of valuing exercises. They are no better in their ability to respond to works of art in ways that deepen understanding and appreciation. Even though their performance is above that of the nation in knowledge and judgments about art, their performance is not at the level that one might expect.

General Results

Most students do not know how to perceive and respond to works of art well enough to apprehend either their sensory qualities or their structures. Even those with the most art instruction are not much better than the rest (see Chapter 5).

Although students know some appropriate criteria for aesthetic judgments, most of them favor mimetic criteria (the closer to reality something is, the better it is) or apply appropriate and inappropriate criteria

indiscriminately. In addition, most students seem unable to go beyond the look of a painting's subject matter in order to make judgments about the merit of a work (see Chapter 5). They are, essentially, artistic literalists.

Although only a few items assessed knowledge of art, they did not reveal particularly widespread knowledge. Seldom did as many as half the students recognize famous works or know when, where or by whom they were created. Questions about art styles elicited almost random response patterns with high percentages of students who simply did not know the answer. Students were more successful with questions about the audiences for which various artworks were created (see Chapter 4).

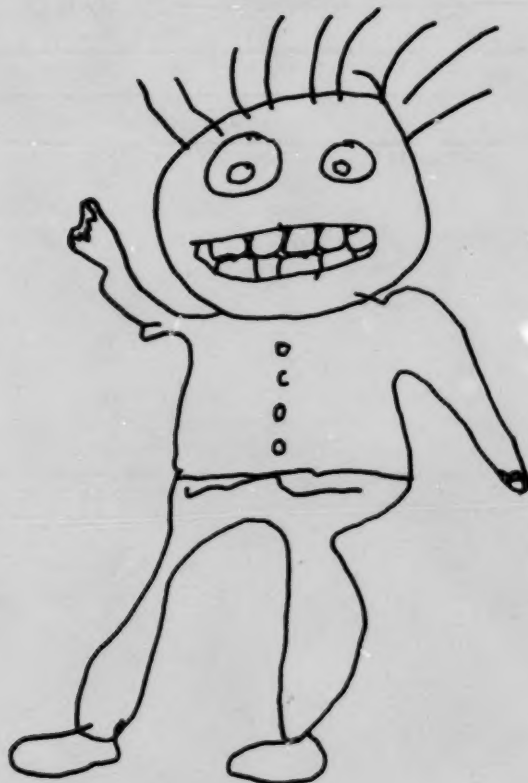


TABLE 1-1. Mean Performance Levels for All Reassessed Exercises and Art Objectives, 1974-75 and 1978-79 †

		Exercises			
	Age	In Mean	1974-75	1978-79	Change
Overall					
	9	(34)	36.9%	37.6%	0.7%
	13	(48)	49.9	47.7	-2.2*
	17	(54)	56.3	54.4	-1.9*
Objective I. Perceive and Respond to Aspects of Art					
	9	(Too few exercises for meaningful average)			
	13	(6)	55.1	55.3	0.2
	17	(6)	65.5	65.8	0.3
Objective II. Value Art as an Important Realm of Human Experience					
	9	(22)	40.2	41.1	0.9
	13	(27)	54.9	51.6	-3.3*
	17	(27)	61.2	57.2	-4.0*
Objective III. Produce Works of Art					
		(Too few exercises for meaningful average)			
Objective IV. Know About Art					
	9	(Too few exercises for meaningful average)			
	13	(7)	37.0	34.4	-2.7*
	17	(12)	50.3	50.2	-0.1
Objective V. Make and Justify Judgments About the Aesthetic Merit and Quality of Works of Art					
		(Too few exercises for meaningful average)			

† See Introduction for caveats about comparing performance on objectives, comparing age level means based on different sets of exercises and placing too much emphasis on means created from too few exercises. Art objectives appear in Appendix A.

*Change is significant at the .05 level.

Figures may not total exactly due to rounding.

† See Introduction for caveats about comparing performance on objectives, comparing age level means based on different sets of exercises and placing too much emphasis on means created from too few exercises. Art objectives appear in Appendix A.

*Change is significant at the .05 level.
Figures may not total exactly due to rounding.

TABLE 1-2. Groups Performing Below or Above the National Level at Two or Three Ages, 1978-79, All Art Exercises

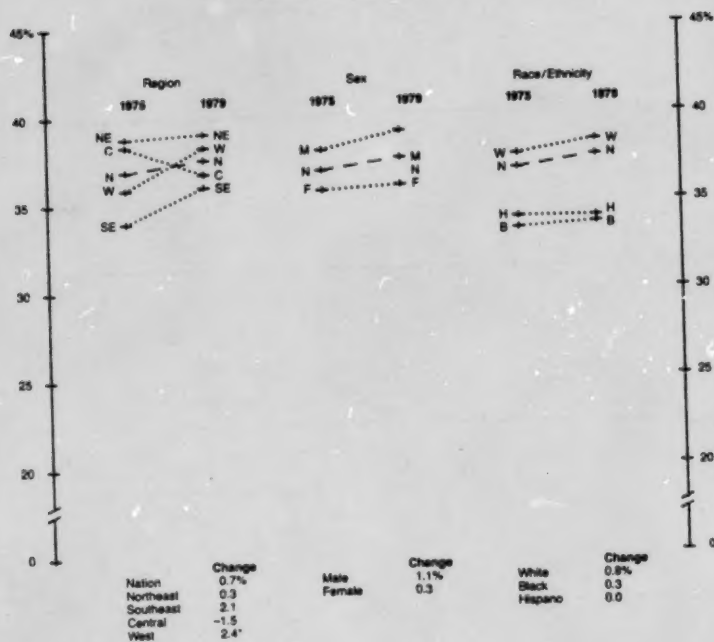
Group	Percentage Points Below Nation		
	Age 9	Age 13	Age 17
Southeast	-1.0	-1.2*	-2.0*
Blacks	-3.4*	-3.5*	-4.6*
Hispanos	-3.3*	-0.8	-3.4*
Parents not graduated high school	-2.4*	-2.5*	-4.6*
Low home environment	-3.7*	-5.3*	-4.0*
School doesn't teach art	-2.7*	-0.1	-3.3*
Do not visit art museums	-3.3*	-4.8*	-8.0*
Do not do art	-4.3*	-10.9*	-8.4*
Disadvantaged urban	-1.2	-1.9*	-2.3*
Black and low home environment	-5.2*	-6.3*	-8.1*
White and low home environment	-3.0*	-5.0*	-2.8*
No art classes taken		-2.7*	-3.6*
Percentage Points Above Nation			
Parents with high school education	3.5*	3.0*	3.1*
High home environment	3.3*	2.3*	1.9*
Advantaged urban	3.2*	1.7	3.6*
Visit art museum often	2.7*	3.3*	4.1*
Do lots of art	5.4*	5.2*	6.2*
Take art classes (2 classes, age 13; 4-6 classes, age 17)		2.4*	6.2*

*Significant at the .05 level.

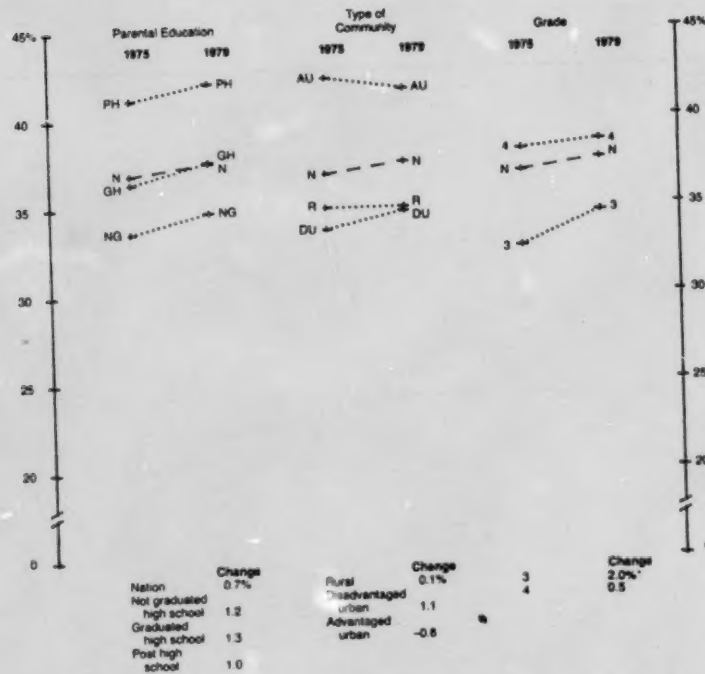


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EXHIBIT 1-1. National and Group Mean Percentages of Success for 9-Year-Olds on Art Exercises Assessed in 1975 and 1979



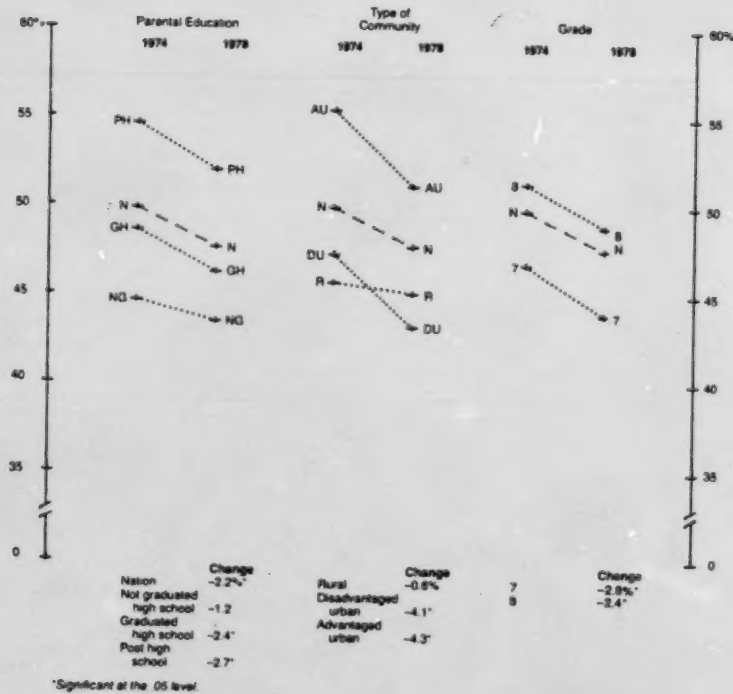
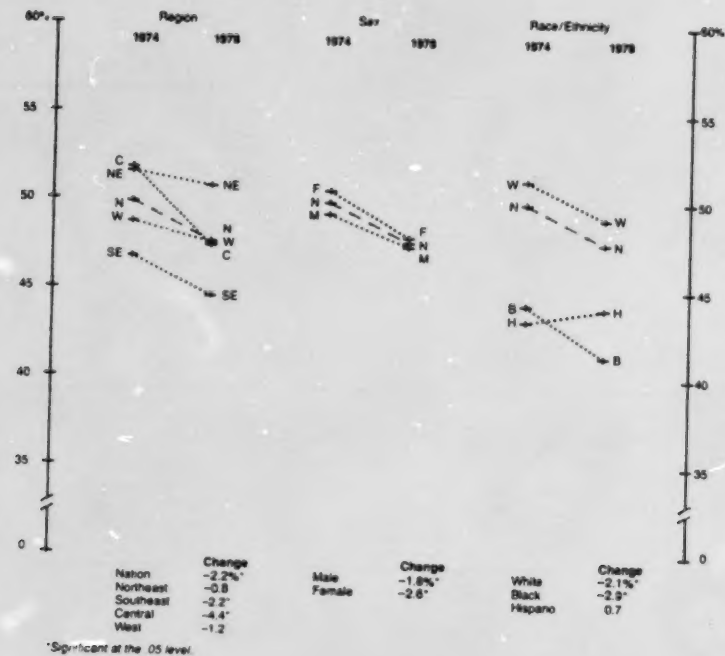
*Significant at the .05 level



*Significant at the .05 level

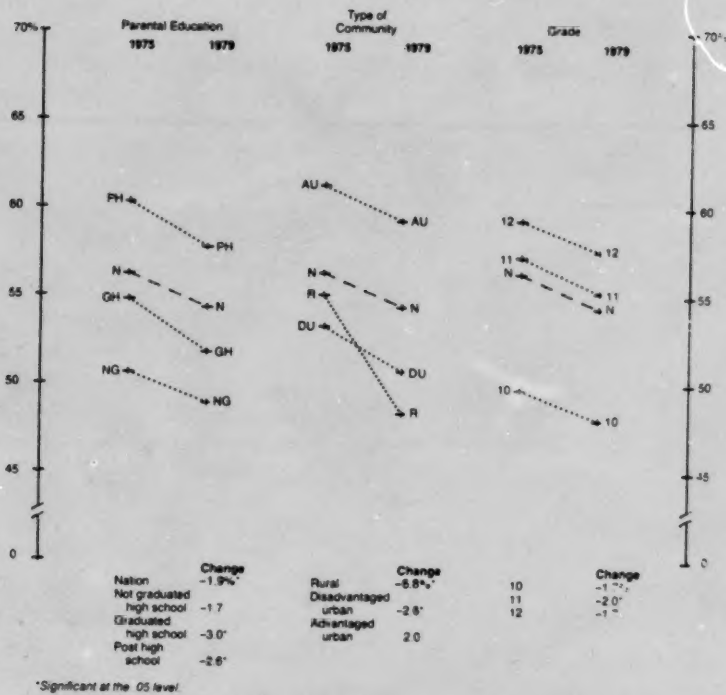
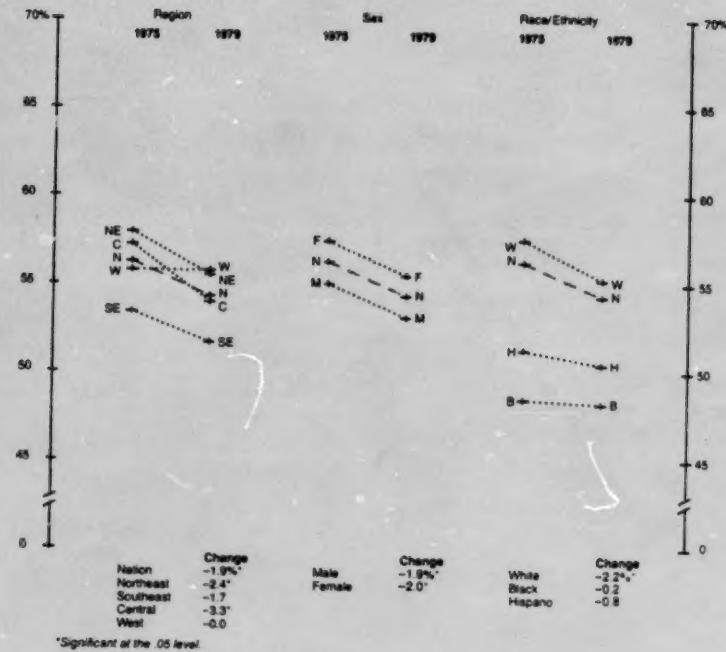
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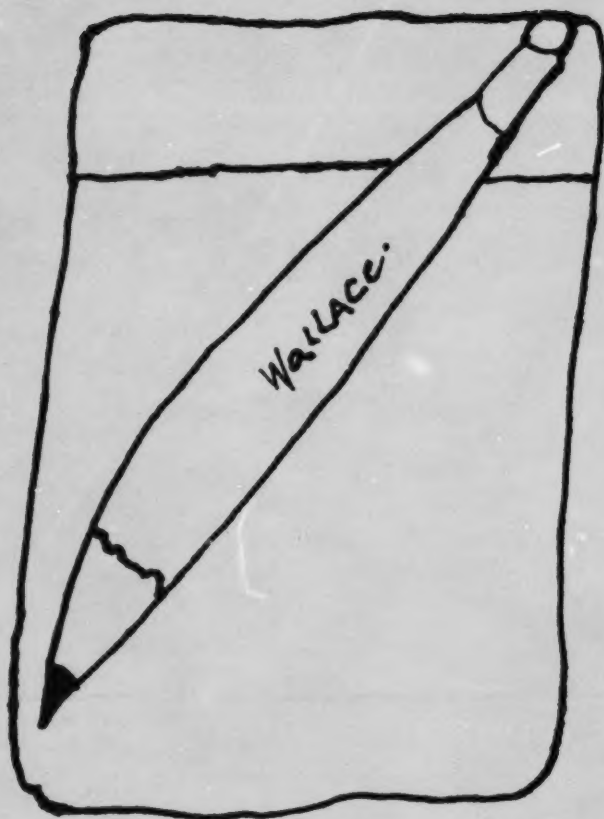
EXHIBIT 1-2. National and Group Mean Percentages of Success for 13-Year-Olds on Art Exercises Assessed in 1974 and 1978



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EXHIBIT 1-3. National and Group Mean Percentages of Success for 17-Year-Olds on Art Exercises Assessed in 1975 and 1979





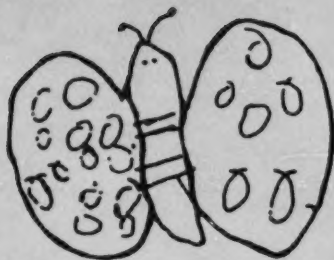
The Social, Educational and Measurement Context of the Art Assessment Results

What do the results presented above and in the following chapters of the report mean? In order to answer that question, Chapman, Silverman and Wilson stressed the importance of understanding the place of the arts in American culture, the amount of art education currently taking place in our schools and the limitations of even the best assessments of art.

America's history is not that of a country greatly concerned with the expressive arts. Rather, Americans have historically been preoccupied with practical affairs and nation building, letting the arts grow where they take root, but not sowing them in a deliberate or united way. This is not to say there has been little art in our culture or that there have been very few people interested in cultivating the arts; rather, it is to say that the arts have never been a high national priority.

The students who were the subjects of these assessments grew up in a culture which is not particularly art-conscious and which harbors many conflicting myths about art and artists. In addition, mass-produced art is everywhere—in our homes, offices and public buildings. Art of a kind is omnipresent in posters, billboards, advertisements, television and movies. Design goes into our cars, clothes, furniture, appliances and buildings. Though they are hardly aware of it, our young people have acquired a considerable "education" in art of this kind before they ever encounter art education in the schools.

Although opinion polls reveal that Americans generally think the arts are important to the quality of life and generally feel they should be taught, the truth is that art has been and is today a low priority item in the school curriculum.



Some form of art activity is offered in almost all elementary schools, of course, but seldom by art specialists. Most elementary programs give children opportunities to explore different art materials and to make things for themselves or their parents, but formal instruction in art history and criticism is infrequent. Even if there is a special art teacher in an elementary school, children are likely to receive only 15-30 hours of instruction per year, or about 180 hours during the total elementary period (Harnishfeger et al., 1979).

Visual arts instruction becomes more structured and is broader in the middle school, where activities such as drawing, painting, sculpture, and various crafts are often taught by art specialists. Most seventh graders are required to take a half-year course in the visual arts, and many eighth graders do so as well. However, in high school, the arts are elective. Emphasis is primarily on studio performance and design skills; very few art history or criticism courses are taught. Most high school students do not take art courses unless they have already developed a strong interest in a particular art or craft or unless they think it will be an easy way to escape more "difficult" courses. And many art teachers cling to the myth that if they *teach* art systematically or in a structured way, they will destroy natural creativity.

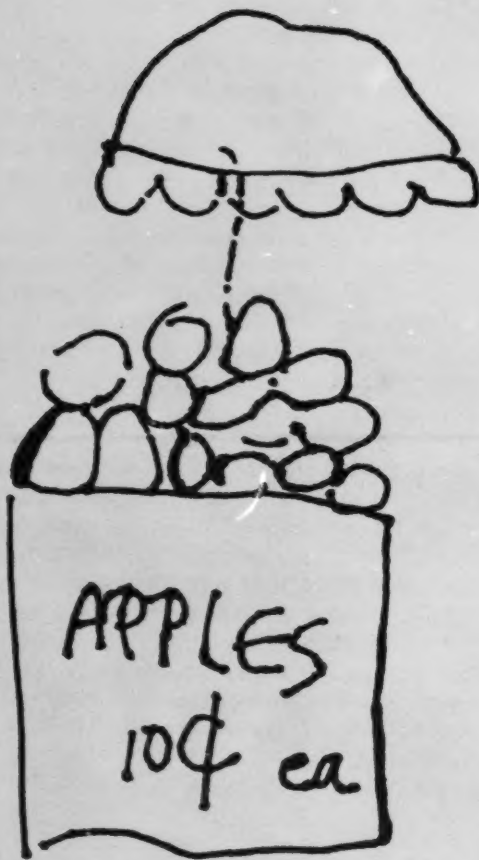
The art assessment results cannot be viewed in the same way, then, as assessment results in reading, writing and mathematics. The students have not been exposed to daily formal

instruction, as they have in other subjects, and the arts do not receive the kind of cultural reinforcement that the more "practical" subjects enjoy.

Finally, interpreters of these results should keep in mind the limitations of any assessment of a subject such as art. Many outcomes of artistic activity, such as an enhanced self-image or the sheer pleasure students can take in the creative process, are difficult to measure and have not been attempted in this assessment. Other aspects of art education are measurable, but only with more resources than the National Assessment could command. Broader coverage of several of the art subobjectives could have provided a more detailed picture and possibly made interpretation much easier. Nevertheless, the art consultants agreed, this assessment of art represents the most comprehensive description of art education in our schools ever attempted.

The important consequences of the social, educational and measurement context in which we view the art assessment results are these:

- Student responses are very likely to reflect the values of the culture at large more than they reflect values acquired through art instruction in schools.
- Students are likely to have learned more from the art opportunities provided through their homes than they are from instruction in school.
- In elementary school, so little art is taught by specialists and so few older students take art courses that we cannot expect many students to have a basic education in the subject of art—especially art history or criticism.





Comments About Specific Findings: What Do They Mean?

All of the consultants pointed out that 9-year-olds would not be expected to change much; they are operating on their basic instincts, responding to art in open but untutored ways.

But should we be concerned about the overall declines at ages 13 and 17? They thought the declines were troubling. Brent Wilson observed: "I'm concerned because the visual arts are such important sources of knowledge. That is to say, art provides an incredible range of graphic and plastic models of humanness (ideal and otherwise) and of the world past, present and future. The possibility of achieving a life of the highest quality is dependent upon having anticipated or imagined what that life might be. Art activities provide even the youngest students with a means for developing a private visual model for a 'good life.' I'm afraid, however, that the schools have not been very helpful in assisting students to 'read' the information contained in works of art, nor have they provided students with the necessary insights and skills to make their own visual models for themselves and their worlds."

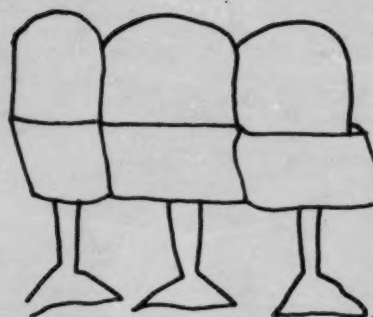
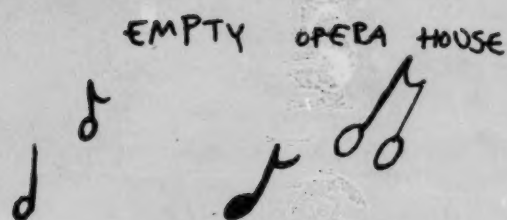
Laura Chapman said the declines were discouraging, "especially in view of the much-publicized increase in the arts audience, the growth of arts councils and attendant investment of public funds for the arts during the last decade. Furthermore, several groups have undertaken national campaigns to urge greater attention to art in education and substantial investments have been made to place artists in schools for short-term residencies. These steps to enhance children's opportunities to study and

to value the arts appear to have been offset by other conditions—among them, the more conservative, job-oriented values within the country, and in particular, by the back-to-basics movement in schools. If young people value the arts less than they did in the mid-70's, the continued growth of the arts audience seems less assured than one might hope."

Ron Silverman agreed, adding: "The significant decline in valuing art is paradoxical. At a time when art is receiving greater support than ever from government and the corporate sector, and when the general public wants more art to be taught in our schools, American youth appear to be less favorably inclined toward art. It is difficult to know if this downward trend is merely a reflection of adolescent rebellion against the values of adults, or if the decline is due to a lack of focus upon the personal and social values of art in our classrooms. In all probability, declines in knowing about art and valuing art are due to increasing emphasis upon the value of 'practical' subjects. The role of art as a contributor to the economic well-being of either individuals or society is too seldom a topic for consideration in our schools; hence, art is not seen as a practical (or valuable) subject for study."

Among the group results, several were singled out for special comment.

Silverman: "Although minority groups, blacks and Hispanos typically did not perform as well as the national population, the 17-year-olds in these groups did not decline between assessments, unlike the national population. This finding, coupled with the rise in reading and writing performances of black youth, leads to



speculation that the compensatory education efforts supported by Title I funding may indeed be making a difference. To what else can we attribute such changes than to the extra education provided to overcome the disadvantages of minority students? Art, because of its concrete nature, is often included in compensatory education programs which have been funded because of their potential to help disadvantaged children and youth.

"The increase for 9-year-old Western students may well be a function of the shift of the general population to the West. More students frequently mean greater diversification, allowing for more art specialist teaching, which appears to affect increases in art performance."

Chapman: "In addition to regional shifts in population, which might explain higher scores by students in the West, it is worth noting that only 28 states require that art be taught in elementary school and only 19 require that art be taught in the junior high or middle school. In 26 states, no record is kept on the number of certified art teachers employed. The point is simple: the amount, quality and availability of art instruction is so poorly monitored on a state and national basis that one cannot determine the degree to which 'token' programs may have been maintained while cutbacks were made in the amount of instruction or the qualifications of teachers offering it."

Wilson: "The group of students who have had four to six art classes—either because they were a select group in the first place or because of the art instruction they have received—outperforms all other 17-year-olds much of the time. This select group scored about 10

percentage points higher than students who have never taken an art class and 6 percentage points higher than the national average on all assessment tasks. But what do these higher scores mean? I personally don't think that art educators should take too much comfort from them, for two main reasons. First, these differences are not as large as I expected them to be. Second, when we examine the performance of this special group in important areas such as judging art, perceiving, and responding to the qualities of art, these students are often little different from any other group of students in the nation. I think that a broadly conceived art curriculum that deals with far more than the production of art could lead these special art students to perform as much as 20 to 30 percentage points above students who have taken no secondary school art classes."

Looking at the results for perceiving, responding to and judging works of art, Wilson was particularly struck by the "literalism" the students displayed. "Students seem not to have learned that a work of art with 'ugly' subject matter may also be aesthetically beautiful," he remarked. "They're greatly diminishing their potential enjoyment of art."

Wilson also felt that the drawing skills results were too low. "Elementary school curriculum guides often contain drawing units relating to the depiction of actions and expressions," he said. "But the assessment results for the 'draw an angry person' exercise show that students don't put much action into their figures and that they do not draw expressively. These are not trivial things. One of the primary reasons young people draw is to produce visual symbolic models of themselves and their worlds so that they can anticipate and test future realities. If children

can't move the characters they create into action, if they can't show emotions, or if they can't draw expressively, then they are deprived of an extremely important way of developing and comprehending reality."

Chapman did not feel that the achievement levels shown in the assessment were high enough, either. "If there were greater attention to art as a subject students must *study, learn about and master*," she said, "I'd expect the performance to be higher across the board."



Silverman elaborated on the importance of drawing skills: "Learning to produce art involves acquiring both interpretative and creative skills. Interpretative skills include abilities to use media to produce surface qualities such as the illusion of roughness or dullness, and representation of people, things and ideas such as the illusion of space, motion or anger. Creative skills relate to possessing abilities to think and work imaginatively and with fluency and flexibility in the production of original forms. The findings from the assessment indicate that neither interpretative nor creative skills are being nurtured at sufficient levels in American schools. Evidently, teachers must be persuaded to move away from either free-expression and imitative art activities and toward the development of *specific* art-making skills if artistic literacy is ever to be developed by a majority of our students and future citizens."

Implications of the Findings

The consultants suggested that if we want to bring the art results more into line with the importance Americans say they attach to art, a number of things will have to be done.

- Art institutions must promote greater awareness of the importance of art to our well being as individuals and our greatness as a nation.
- Educators must promote greater awareness of the many ways aesthetic education dovetails with education in other areas. Art need not be a "frill"; it can be central to the curriculum.



- There must be a change in the focus of contemporary art education so that it includes more instruction in perceiving, responding to and evaluating aesthetic experience.
- Art leadership must be developed within school districts to ensure that art is taught in a contemporary way, i.e., without reliance upon copy-work activities or holiday projects and in relation to objectives concerned with developing *specific* skills for creating and appreciating art.
- Romantic notions about the child and art need to be replaced by the realization that to be art educated implies possessing (a) an understanding of a body of subject matter—contemporary and historical aesthetic objects, theories and facts to be comprehended—and (b) a repertoire of skills for expressing oneself aesthetically in visual form.
- The current level of interest in the arts outside of the schools, in the form of

unprecedented corporate and government support for the arts, needs to be matched by an equal effort to sponsor art programs which are designed to develop future artists and, even more importantly, an enlightened audience for the arts.

- Myths that hamper the development of sound art programs in schools must be systematically attacked. Among these myths, none is more telling than the Harris Survey question to which more than 75% of the public (85% of the arts audience) agreed: "You don't have to study or learn about art in order to enjoy or appreciate it." Surely this attitude, widely held, is one of the chief obstacles to children's acquisition of knowledge about art skills and attitudes toward art which favor life-long interest in the arts. Equally mistaken are such clichés as "Art speaks for itself" and "Art is primarily a matter of talent, not training." These views are fundamentally demeaning to the hard work, dedication and intelligence required to create art and to appreciate artists.

Chapter 2

Art Education and Experiences

About 9 of every 10 students attend elementary and secondary schools offering some kind of instruction in art. Although a few financially troubled school systems have cut back somewhat on their art offerings, National Assessment data indicate that opportunities for at least minimal art education have not changed significantly through the late seventies.

In addition to the schools, most communities offer a range of art education opportunities through museums, galleries, recreation centers and clubs. And, of course, many young people have opportunities to learn about art and express themselves informally through hobbies, drawing and various crafts.

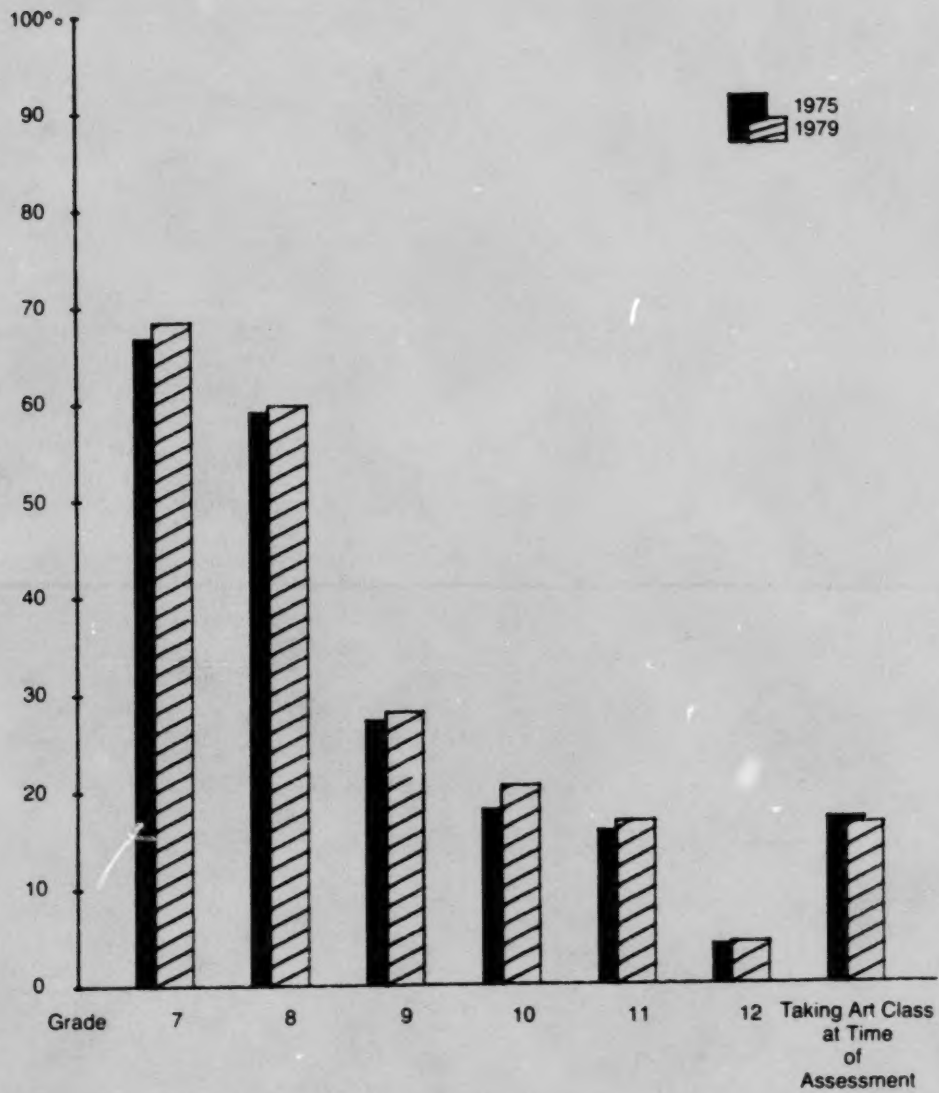
In order to put the results of the 1978-79 art assessment in proper perspective, it would be useful to know how involved our young people are in art-related activities. This chapter presents the available information National Assessment has about formal and informal experiences with art.

Art in the Schools

In both assessments, 17-year-olds were asked to indicate in which of grades 7-12 they took art classes. Exhibit 2-1 shows that their greatest involvement in formal art instruction was in grade 7 and that involvement diminished considerably when they moved into high school. By the 11th grade (the grade in which we find most 17-year-olds), about one student in six was taking art instruction, down from about two out of three in the 7th grade. Exhibit 2-1 also shows that there has been little change in this pattern over the four years between assessments.



**EXHIBIT 2-1. Percentages of 17-Year-Olds Having Taken Art Classes
in Grades 7-12, 1975 and 1979**



Thirteen-year-olds, most of whom are in the eighth grade, were also asked about their experiences with art classes, and their answers roughly corroborated what the 17-year-olds remembered. From their responses, it appears that about two-thirds of the students in seventh grade and about half the students in eighth grade take art classes. Again, these proportions seem to have changed little, if at all, between 1974 and 1978. As Table 2-1 reveals, about three-fourths of the 13-year-olds take at least one art class in junior high school and more than 40% take art in both grades 7 and 8.

TABLE 2-1. Percentages of 13-Year-Olds Taking Art Classes in 7th and 8th Grades, 1974, 1978

	1974	1978	Change
7th or 8th	76.0%	77.3%	1.3%
Both 7th and 8th	42.2	43.2	1.0

Finally, in the 1978-79 music assessment, 9-year-old students were asked which of several activities they would prefer to do if they had a free school hour in which to do anything they wanted. Of the choices offered, drawing elicited the strongest response (Table 2-2).

TABLE 2-2. 9-Year-Olds' Responses to the Question: "Which One of the Following Things Would You Rather Do If You Had One Free Period a Day in School?" 1979

Draw or paint	34.0%
Play a musical instrument	14.4
Learn a foreign language	13.9
Listen to music	10.5
Write a story	9.0
Sing in a musical group	4.5
None of these	10.4

Art Outside the Schools

Students at all three ages were asked how often they had visited art museums or galleries. Table 2-3 reveals that majorities at all three ages have visited such places at least once and that the proportion doing so increased between 1974 and 1979, especially at age 9. As heartening as that trend is, it is still important to point out that in 1979, 45% of the 17-year-olds had either never been to a museum or had been only once in their lives.





At all three ages, visitation was less frequent for students living in the Southeast and in small towns and rural communities, for students from disadvantaged backgrounds and for those who do not do any art activities or attend schools where art is not taught. Visitation is higher than the national average in the West, among students from advantaged backgrounds and for students who participate in art activities.

How many students engage in art activities on their own, outside of school? The data in Table 2-4 suggest that a great many young people pursue art interests informally, but the proportion shrank somewhat between 1974 and 1979 for the teenagers.

TABLE 2-3. Percentages of Students Visiting Museums or Galleries, 1974-75, 1978-79

	Age 9			Age 13			Age 17		
	1975	1979	Change	1974	1978	Change	1975	1979	Change
Never visited	37.8%	30.7%	-7.1%*	26.0%	21.0%	-5.0%*	18.6%	17.2%	-1.3%
Once only	29.9	29.9	0.0	30.1	30.3	0.2	27.9	28.1	0.3
5 times	19.2	22.2	3.0*	29.9	31.8	1.9	34.5	34.8	0.3
10 times	5.4	6.9	1.4	7.8	8.4	0.6	10.5	11.1	0.6
>15 times	7.1	10.0	3.0*	5.8	7.8	2.0*	8.0	8.3	0.2
At least once	61.6	69.0	7.4*	73.5	78.3	4.8*	80.9	82.4	1.4

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

TABLE 2-4. Percentages of Students Pursuing Art Activities Outside of School, 1974-75, 1978-79

	1974-75			1978-79			Change		
	Age 9	13	17	Age 9	13	17	Age 9	13	17
A. Drawing	50.3%	78.4%	60.7%	52.9%	75.8%	58.3%	2.6%	-2.5%	-2.4%
B. Painting	35.8	44.2	32.3	34.7	36.3	27.1	-1.1	-7.8*	-5.2*
C. Making pictures by cutting & pasting paper, cloth & scrap materials	24.9	30.8	21.6	23.8	26.4	16.8	-1.1	-4.4*	-4.7*
D. Carving or modeling in wood, stone, clay, metal or plastic	40.8	45.5	31.2	41.2	43.5	28.9	0.4	-2.0	-2.3
E. Print-making such as block printing, silk screening, etching	—	16.9	13.8	—	17.0	12.9	—	0.0	-0.9
F. Making pottery, ceramics or mosaics	—	24.1	16.7	—	22.7	15.9	—	-1.4	-0.8
G. Weaving, macrame or knotting, or needle-work such as embroidery, needle-point, knitting, crocheting	—	51.9	45.6	—	47.8	44.4	—	-4.1*	-1.2
H. Making photographs or films	—	33.8	38.2	—	37.1	41.1	—	3.4*	2.9
I. Making jewelry	—	22.8	18.7	—	18.9	11.6	—	-3.9*	-7.0*
J. Creating designs or plans for things like clothes, toys, cars, houses, furniture	—	50.9	42.1	—	47.6	40.9	—	-3.3*	-1.2
At least 2	—	86.5	74.5	—	84.7	71.9	—	-1.8	-2.6*
At least 3	—	73.6	58.6	—	70.3	55.4	—	-3.4*	-3.1*
At least 4	—	56.7	42.5	—	52.3	37.3	—	-4.4*	-5.2*
At least 1 of A through D	65.8	89.6	74.6	68.0	87.7	71.5	2.2	-1.9*	-3.1*

Figures may not total exactly due to rounding.

Art activity appears to peak at age 13 and then dip as students move through high school. Sixty-eight percent of the 9-year-olds in 1979 indicated they did at least one of activities A-D; at age 13, that proportion was 88% and at age 17 it was 72%. The percentages of teenagers doing at least 4 of the 10 activities dropped about 4 percentage points at age 13 and about 5 points at age 17 between assessments.

At all ages, the most popular activity was drawing. For the youngest students, the next most popular was carving or modeling (probably making models), followed by painting and then collage.

Thirteen-year-olds' second most active interest was textile arts (more popular among girls) and design (more popular among boys). Then came modeling, photography and painting.

Among the oldest students, textile arts was second most popular (especially for females), followed by photography and design.

It is interesting to note that although teenagers' participation in almost all activities declined, it increased for photography.

Another index of art activity is the extent to which young people buy or collect works of art. Table 2-5 shows that at least a fourth to about a third of the teenagers collect either original works or reproductions. However, those proportions represent declines from the mid-seventies.

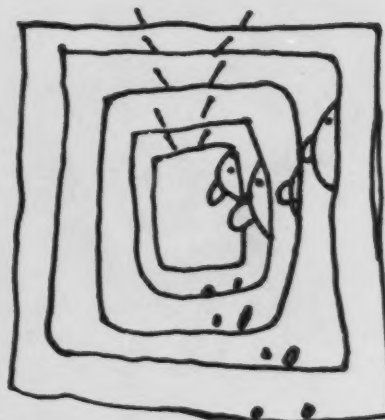
TABLE 2-5. Percentages of 13- and 17-Year-Olds Collecting Original Artworks or Reproductions, 1974-75, 1978-79

	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Originals	24.3%	20.7%	-3.6%*	30.8%	24.1%	-6.6%*
Reproductions	32.6	26.7	-5.9*	39.0	31.6	-7.4*
Antiques	—	—	—	50.6	48.1	-2.5

*Significant at the .05 level.

Figures may not total exactly due to rounding.

In addition to gathering information about participation in art activities, the assessment also probed students about attitudes that would influence their involvement. Part A of the following exercise indicates that three-quarters of the students at all ages do not believe that doing art is "a waste of time." But parts B and C show that students' confidence in themselves as artists erodes as they get older. Only half as many 17-year-olds as 9-year-olds express confidence in their art skills.



Is each of the following statements TRUE ABOUT YOU or NOT TRUE ABOUT YOU?									
	True about me			Not true about me			I don't know.		
	Age 9	13	17	Age 9	13	17	Age 9	13	17
A. I think doing art is a waste of time.	12.0%	13.3%	10.4%	74.9%	78.1%	78.5%	11.9%	6.1%	10.8%
B. I am pretty good at getting my ideas across through drawings and paintings.	58.6	44.7	29.4	17.7	41.4	50.2	22.8	12.6	20.1
C. People tell me that I am a good artist.	47.0	35.9	22.4	28.3	50.3	63.1	24.0	12.5	14.0

Figures may not total exactly due to rounding or % not responding.

Another item asked students whether they agreed or disagreed with the statement that "the study of art is of no real value unless one wants to make it his life's work."

	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Strongly agree	12.6%	12.8%	0.2%	5.9%	7.3%	1.4%
Agree	21.4	23.3	1.9	14.9	17.6	2.7
Undecided	13.3	15.1	1.7	8.6	10.1	1.5
Disagree	36.4	32.2	-4.1*	44.2	45.0	0.8
Strongly disagree	16.1	16.6	0.5	26.3	19.7	-6.5*

*Significant at the .05 level.
Figures may not total exactly due to rounding or % not responding.

Although about half the 13-year-olds and two-thirds of the 17-year-olds disagreed with the statement in 1978-79, those percentages are down from 1974-75, significantly so for the older students. Decreasing numbers of 17-year-olds appear to understand the goals of art instruction, and this could certainly affect their participation in art classes and activities.

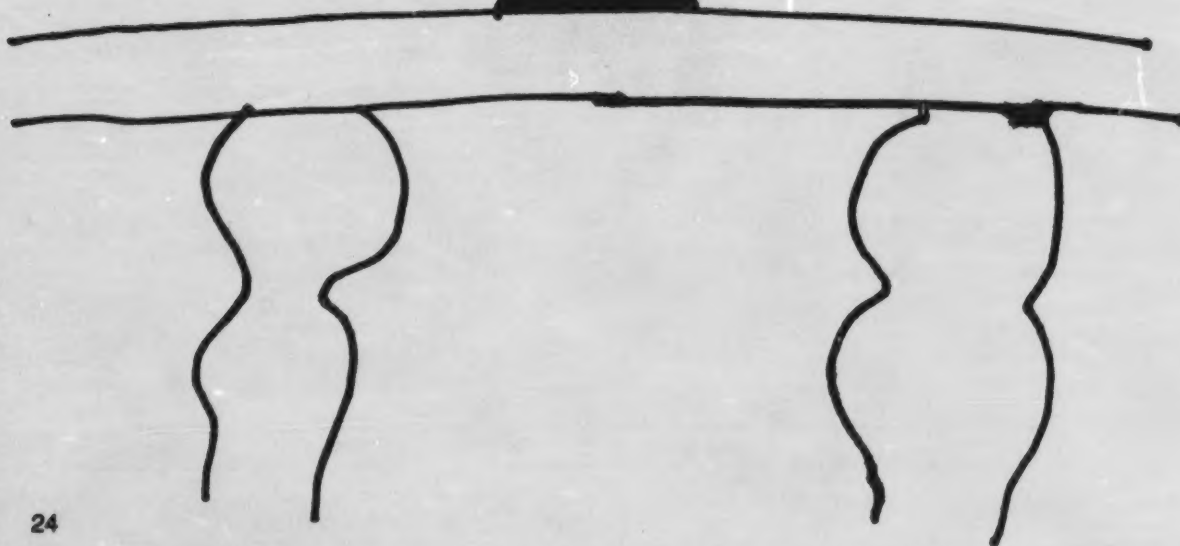
Do students think art is over-stressed in the schools? Majorities at both ages do not think so, apparently, but many are undecided:

Our schools place too much emphasis on art.

	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Strongly agree	3.9%	4.1%	0.2%	1.1%	0.9%	-0.1%
Agree	10.0	10.0	0.0	3.3	3.5	0.2
Undecided	26.5	25.3	-1.2	17.6	17.4	-0.2
Disagree	46.2	43.8	-2.3	59.4	59.2	-0.2
Strongly disagree	13.4	16.5	3.0*	18.4	18.8	0.5

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

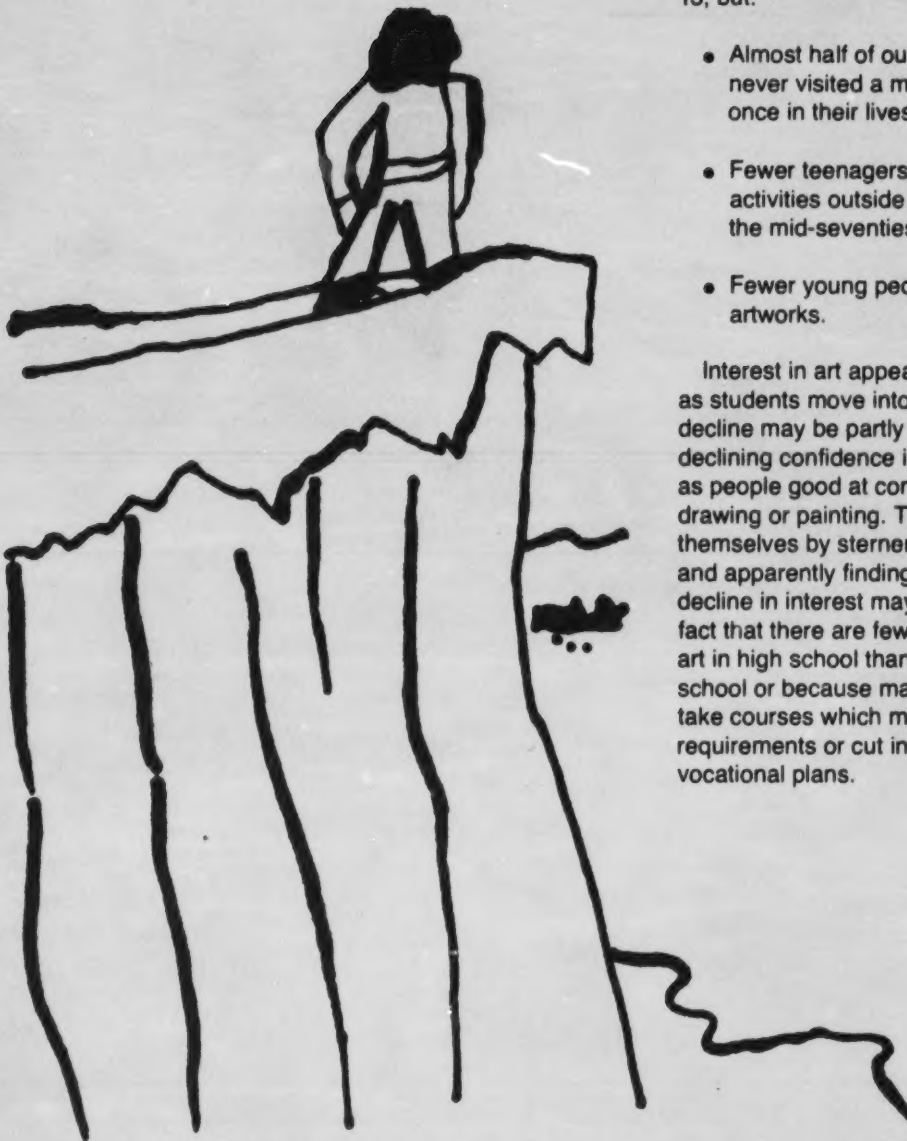


In Summary

Although involvement with art in the schools does not appear to be changing much, pursuit of art activities outside of school seems to be declining. Museum visitation is up for ages 9 and 13, but:

- Almost half of our 17-year-olds have either never visited a museum or have been only once in their lives.
- Fewer teenagers are pursuing art activities outside of school than did so in the mid-seventies.
- Fewer young people are collecting artworks.

Interest in art appears to decline considerably as students move into high school. The decline may be partly accounted for by students' declining confidence in themselves as artists or as people good at communicating through drawing or painting. They could be judging themselves by sterner criteria as they get older and apparently finding themselves wanting. The decline in interest may also be a reflection of the fact that there are fewer opportunities to pursue art in high school than there are in junior high school or because many high school students take courses which meet college entrance requirements or cut into their career or vocational plans.



Chapter 3

Valuing Art

A positive orientation to art is an indication that students have opportunities to grow up in an environment—home, school, community—where looking at works of art is socially approved if not actively encouraged. In the absence of a home and community support system to develop a positive orientation to the world of art, the school becomes the major agency for promoting an appreciation of art. If it is obvious that appreciation of the arts is not emphasized in many schools, it is nevertheless a subject which, according to two Harris Surveys, most Americans (over 70%) say they want their children to study in school, and for "full credit," just like English and mathematics (*Americans and the Arts*, 1981).

For this section of the assessment, items were designed to determine the kind of art students value, the extent to which students have a positive orientation to art and the degree of sophistication in their concept of art's value. Students were presented with a number of visual examples, selected to represent a variety of styles of art. Questions were asked to determine whether students think it is important for them to look at art and whether they enjoy doing so. Other exercises were framed to find out whether students have a naive or well-developed concept of art. In addition, exercises were presented to assess open-mindedness toward different styles of art and experimentation in art.

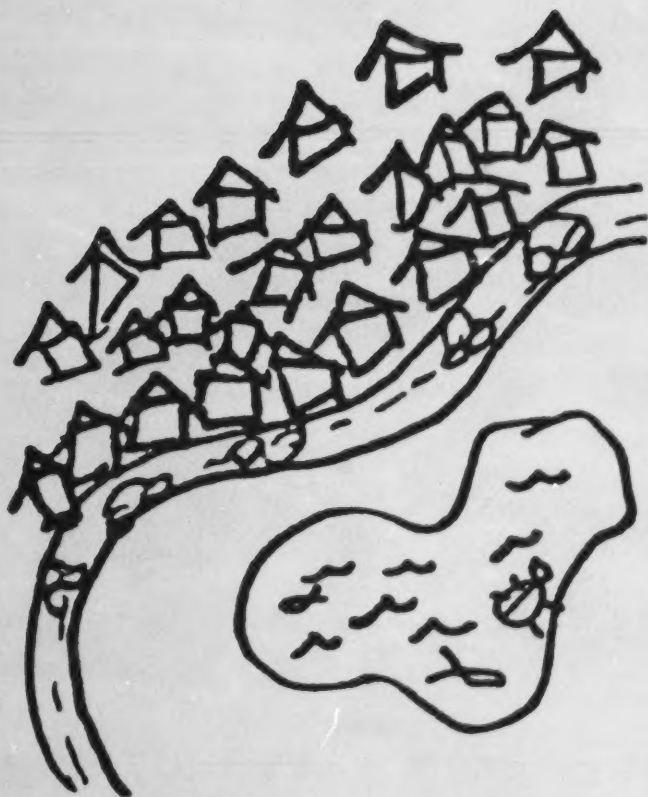


TABLE 3-1. Mean Percentages of Positive Responses to Objective II Exercises, All Ages, 1974-75 and 1978-79

	1974-75	1978-79	Change
Age 9	40.2%	41.1%	0.9%
Age 13	54.9	51.6	-3.3*
Age 17	61.2	57.2	-4.0*

*Significant at the .05 level.

Overall results for the students appear in Table 3-1. In all, 9-year-olds responded to 22 valuing items, while 13- and 17-year-olds responded to 27. There was no change for 9-year-olds, but both older groups declined significantly between assessments.

A subset of the valuing items assessed "positive orientation" toward art. On these items, mean percentages were about 40% or less at all three ages. Positive responses increased between ages 9 and 13 but not between ages 13 and 17. Few items garnered more than a 70% positive response, and those items with the highest response were essentially representational or functional. Two of these are displayed in Figure 3-1 and Figure 3-2.

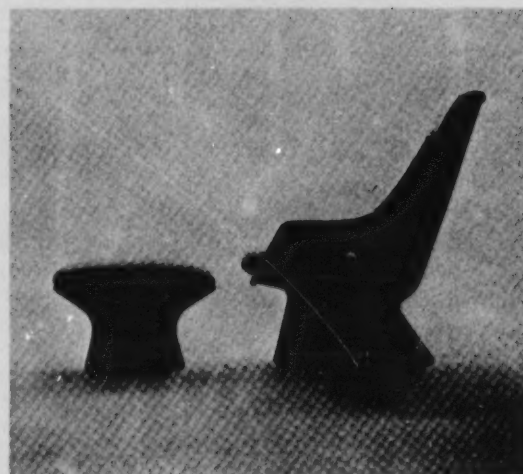


PLATE 1.

FIGURE 3-1.

It's all right for furniture to look like this.

	1974-75	1978-79	Change
AGREE or STRONGLY AGREE			
Age 9	78.2%	89.6%	11.4%*
Age 13	92.3	92.0	-0.3
Age 17	93.5	94.0	0.4
UNDECIDED			
Age 9	10.8	4.3	-6.5*
Age 13	4.2	4.1	-0.1
Age 17	3.7	4.1	0.4
DISAGREE			
Age 9	10.8	6.1	-4.8*
Age 13	2.4	2.5	0.1
Age 17	2.0	1.1	-0.9
STRONGLY DISAGREE			
Age 13	1.1	1.4	0.3
Age 17	0.7	0.7	-0.1

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.



PLATE 2.

Among the items receiving the lowest positive response from students at two or more ages are works that display extreme simplicity (a simple egg-like marble sculpture by Brancusi) or exaggeration in form (the Warenga mask in Figure 3-3) or those that employ unconventional techniques (Figure 3-4).

FIGURE 3-2.

Sculptures should NOT look like this.

	1974-75	1978-79	Change
STRONGLY AGREE			
Age 13	1.7%	1.8%	0.1%
Age 17	1.8	1.4	-0.4
AGREE			
Age 9	18.6	18.3	-0.2
Age 13	3.0	2.2	-0.8
Age 17	2.0	1.3	-0.7
UNDECIDED			
Age 9	19.6	15.9	-3.7*
Age 13	7.3	7.3	0.0
Age 17	4.6	5.5	0.8
DISAGREE			
Age 9	61.6	65.6	4.0
DISAGREE or STRONGLY DISAGREE			
Age 13	88.0	88.8	0.7
Age 17	91.5	91.7	0.2

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.



PLATE 3.

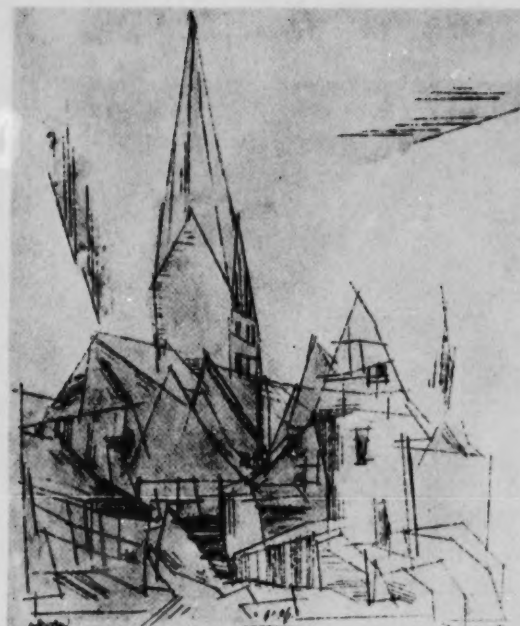


PLATE 4.

FIGURE 3-3.

Do you enjoy looking at this mask?

	1974-75	1978-79	Change
YES or DEFINITELY YES			
Age 9	30.8%	21.6%	-9.2%*
Age 13	39.6	34.4	-5.2*
Age 17	37.0	29.5	-7.5*
UNDECIDED			
Age 9	6.2	9.6	3.4*
Age 13	12.8	11.6	-1.1
Age 17	15.8	15.3	-0.5
NO			
Age 9	63.0	68.7	5.7*
Age 13	34.9	34.9	0.0
Age 17	37.4	40.2	2.8
DEFINITELY NO			
Age 13	12.7	19.0	6.3*
Age 17	9.7	14.8	5.1*

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

FIGURE 3-4.

Do you think it's important for you to look at drawings like this?

	1974-75	1978-79	Change
YES or DEFINITELY YES			
Age 9	25.7%	15.5%	-10.2%*
Age 13	36.7	31.3	- 5.4*
Age 17	44.4	32.1	-12.3*
UNDECIDED			
Age 9	15.8	15.3	- 0.5
Age 13	21.2	21.8	0.6
Age 17	22.8	26.2	3.4*
NO			
Age 9	58.4	69.1	10.7*
Age 13	33.1	33.8	0.6
Age 17	27.2	32.0	4.8*
DEFINITELY NO			
Age 13	8.8	13.1	4.2*
Age 17	5.5	9.4	3.9*

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Among the works receiving the least dramatic variations in response across all ages (in addition to the furniture shown in Figure 3-1) were a Mondrian (Figure 3-5) marked by great simplicity and a painting by Francis Bacon (Figure 3-6), based on the environment of a slaughterhouse. On both of these items, 13- and 17-year-olds' performance was about the same; however, on Picasso's *Weeping Woman*, 17-year-olds' positive responses were somewhat higher than 13-year-olds.

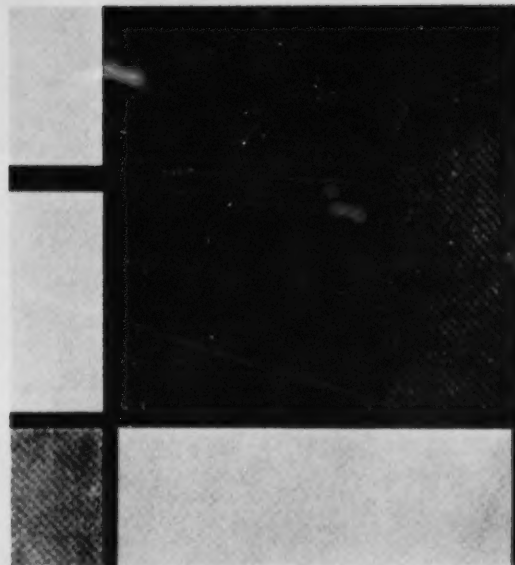


PLATE 5.

FIGURE 3-5.

It's all right for paintings to look like this.

	1974-75	1976-79	Change
AGREE or STRONGLY AGREE			
Age 9	52.1%	38.1%	-14.0%*
Age 13	45.9	40.0	- 5.9*
Age 17	43.9	40.9	- 2.9
UNDECIDED			
Age 9	17.0	17.9	0.8
Age 13	17.2	17.0	- 0.2
Age 17	19.0	16.9	- 2.1
DISAGREE			
Age 9	30.8	43.8	13.0*
Age 13	22.1	24.4	2.3
Age 17	24.1	25.7	1.6
STRONGLY DISAGREE			
Age 13	14.8	18.7	3.9*
Age 17	12.7	16.4	3.7*

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.



PLATE 6.

FIGURE 3-6.

Paintings should NOT look like this.

	1974-75	1978-79	Change
AGREE			
Age 9	48.9%	40.3%	-8.5%*
Age 13	18.7	19.3	0.6
Age 17	15.8	18.6	3.0*
STRONGLY AGREE			
Age 13	17.4	23.1	5.7*
Age 17	14.4	18.5	4.1*
UNDECIDED			
Age 9	17.9	19.1	1.2
Age 13	19.4	19.1	-0.2
Age 17	24.7	23.5	-1.2
DISAGREE or STRONGLY DISAGREE			
Age 9	33.1	40.4	7.3*
Age 13	44.5	38.3	-6.2*
Age 17	45.1	39.2	-5.9*

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Groups differed in their responses to various subsections of the exercises on valuing art. Boys at age 9 were more positively oriented than girls toward looking at art, and at ages 9 and 13 were more open to various styles of art. Girls at age 17 enjoyed looking at art more than boys. Black students at ages 13 and 17 reported that they enjoyed looking at art more than whites. They were less open than white students to varieties of art and more accepting of criteria for judgment based on the cost, subject matter and length of time involved in producing a work.

Generalizations About the Value of Art

There is a distinction between valuing art in the sense of enjoying it and valuing art in the sense of having a concept of art that is sufficiently developed to allow for judgments based on appropriate critical standards. The specific critical standards that students use to judge works of art are discussed in Chapter 5. Here we are interested in whether students are naive or sophisticated in the values they associate with "good" art.

What general concepts about "good" art do young people have? Do they endorse unsophisticated reasons for valuing art, such as their preferences for the subject matter, their expectation that the work tells a story, the cost of a work, others' opinions about it, or how long it took to create?

Students' answers to these questions provide an indication of their opportunity to reflect on the nature of art and why people may value a given work. Responses also indicate the degree to which students are willing to go along with generalizations about art that have little direct bearing on the intrinsic value, artistic merit or evocative power of a particular work of art.

As students grow up, they are apparently less likely to see the cost of a work as relevant to attributions of merit or worth or significance. At all ages, only a small proportion of students are "undecided" about the role of cost in determining the worth of an art object (Table 3-2).

TABLE 3-2. Responses to the Statement, "If a Painting Costs a Lot of Money Then It Must Be Good."

	1974-75	1978-79	Change
Agree/strongly agree			
Age 9	77.4%	79.3%	1.9%
Age 13	39.9	42.5	2.6
Age 17	23.3	25.4	2.2
Undecided			
Age 9	9.8	8.9	-0.9
Age 13	9.0	9.1	0.2
Age 17	7.6	8.4	0.8
Disagree/strongly disagree			
Age 9	12.6	10.7	-1.9
Age 13	51.1	48.3	-2.8
Age 17	69.1	66.1	-3.0

Figures may not total exactly due to rounding or % not responding.

At every age, at least two-thirds of the students were uncertain or unable to distinguish between the artistic merit of a work and such considerations as the time that it takes to create a work, its narrative or story-telling quality, or its subject matter. Consider this example.

TABLE 3-3. Responses to the Statement, "When a Painting Has Horses in It the Painting is Usually Quite Good."

	1974-75	1978-79	Change
Agree/strongly agree			
Age 9	55.8%	59.1%	3.3%
Age 13	53.3	53.4	0.0
Age 17	35.7	36.7	0.9
Undecided			
Age 9	23.7	19.4	-4.3*
Age 13	20.9	22.1	1.2
Age 17	31.7	31.2	-0.5
Disagree/strongly disagree			
Age 9	20.2	21.1	0.9
Age 13	25.6	24.4	-1.2
Age 17	32.4	31.8	-0.5

**Significant at the .05 level.*

Figures may not total exactly due to rounding or % not responding.

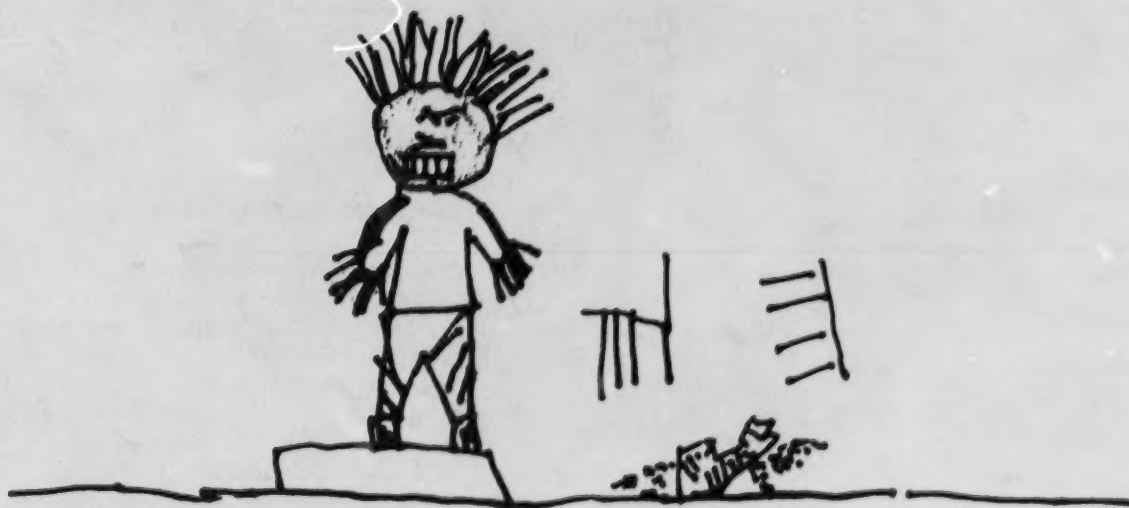
The "undecided" answers of students may be interpreted either as an indication of their uncertainty about the best response or as an indication of their general distrust of generalizations about art. In any case, as students increase in age, they appear to be less certain (more undecided) about the value they should attach to the subject matter in a work, and also about the weight they should give to the amount of time taken to create it.

One exercise asked about the importance of relying on authoritative opinions in determining the worth of art. At ages 13 and 17, about 45% agreed that "it is best to accept the word of well-known art critics and authorities." As students grow up, they appear to be more confident in their own ability to determine the worth of art, less willing to rely upon expert opinion. Uncertainty about whether to rely upon the word of art critics and authorities decreases from age 13 (31%) to age 17 (21%).

The uncritical acceptance of authoritative and art critics' evaluations of art is, of course, unwise; but especially so in art, where judgments about merit have proven, in time, to need revision. (Van Gogh was not honored in his own time, nor were countless other artists.) An awareness of this kind of fallibility marks one as having developed a concept of art. In schools where art is not taught, students age 17 more frequently "agree" that one should rely on the word of art experts (by a 16% margin), perhaps because their own concepts of art are less developed. Students with four to six art classes "disagree" that the word of experts should be accepted about 10% more often than the national average. Students who create art out of school (even as much as four to six kinds of art) are evidently just as willing to defer to experts,

for they do not much differ from the national average for 13-year-olds and are no different from all 17-year-olds on this exercise. Students who frequently attend art museums also respond like the national population on this exercise, but perhaps because the museum, as an institution, so clearly represents the cumulative decision making of art authorities.

In 1978-79, as compared with 1974-75, teenage students appear less open to different styles of art and experimentation in art and appear less positively oriented toward art. The 9-year-olds appear to be largely untouched by these trends. Their levels of enjoyment and reasons for attributing value to art are at about the same level as in the first assessment.



Chapter 4

Knowledge of Art History



A knowledge of art history can enhance our perception of art in several ways. It can provide information about the lives of artists and the world that might have influenced their art. It can enhance our ability to recognize stylistic features that may be characteristic of an individual artist, period and culture. A knowledge of art history can inform our response to individual works of art, providing insights that permit us to interpret their meanings and evaluate them beyond the simple level of expressing our preferences.

The art history exercises in the assessment were designed to assess students' acquaintance with well-known works of art as well as their general knowledge of historical, cultural and stylistic differences in art. Since it was not possible to measure knowledge about all types of art, many of the exercises concentrated on understanding the Western tradition of art. A few exercises called for some familiarity with works produced outside of this tradition—for example, in Mexico, China and Africa.

Almost all of the exercises emphasized the use of visual clues to answer questions or the acquisition of broad concepts, such as the common names for artistic styles or periods. Students were not expected to recall the names of artists or titles of specific works of art. Neither were they expected to have a very precise grasp of chronological developments in art.

There were only 4 knowledge questions asked at age 9, 7 at age 13, and 12 at age 17 in both 1974-75 and 1978-79. Although those are not substantial numbers of exercises on which to base definitive statements, at ages 13 and 17 they provide enough information to suggest that knowledge of art has not increased and may even have decreased at ages 13 and 17 (Table 4-1). There were significant declines in 9-year-olds' performance on three of the four exercises given in both assessments, but it is hard to generalize from three exercises.

TABLE 4-1. Mean Percentages of Success on Knowledge Items, Ages 13 and 17, 1974-75, 1978-79

	1974-75	1978-79	Change
Age 9	(Too few exercises for meaningful average)		
Age 13	37.0%	34.4%	-2.7%*
Age 17	50.3	50.2	-0.1

*Significant at the .05 level.

Figures may not total exactly due to rounding.

Two areas were assessed at all three age levels: recognizing well-known works of art and identifying the country of origin for selected works. In addition, the 13- and 17-year-olds were asked to use stylistic features to identify the approximate chronological placement of a work, to identify works produced during the same period or by the same artist and to choose the commonly used style name (Impressionism, Surrealism) for particular works.

Success on the art history items is perhaps an indication of the students' opportunity to see many works of art (or reproductions of them) and to study works of art in an analytical manner—that is, with an emphasis on conceptual understanding. It is probable that some general familiarity with art history is gained through the

mass media, particularly television, and the mass merchandizing of particular images, such as replicas of Michelangelo's *Head of David*, Rodin's *The Thinker* and the *Mona Lisa*. However, for the majority of students, the general instructional program in school is the most likely source of the kind of knowledge assessed in these exercises.

Although knowledge about art history is needed for an in-depth appreciation of art, it is not the most emphasized part of the schools' art curriculum. At all levels, producing art usually receives far more attention than the study of art history. Only 7 to 10% of our high schools offer separate courses in art history (Rundskopf et al., 1978). Most art teachers appear to favor an informal use of art history to enhance students' skills in making art or to illustrate "historical designs and techniques" that might inspire them to be inventive in creating art (Chapman, 1979). It also seems likely that students' familiarity with historical or cultural significance has been influenced by the illustrations they have encountered in social studies, as well as art, classes.



The following items and results are presented to suggest the character of this section of the assessment.

In several exercises, students were shown four works of art and asked to identify which was the most well-known. Although 66% of the 17-year-olds correctly identified Michelangelo's *Pieta*, less than half of the students recognized a

well-known artwork by Rembrandt (*Night Watch*) or correctly identified a drawing as the work of Leonardo daVinci. Figure 4-1 shows the comparisons students were given on the daVinci exercise. Note that the 9- and 17-year-olds declined considerably (10-11%) and that over 20% of the students indicated they did not know the answer.





PLATE 7.



PLATE 8.



PLATE 9.



PLATE 10.

FIGURE 4-1.

Four works of art are shown on this and the next page. Which was done by Leonardo da Vinci? Fill in the oval beside only ONE of the four pictures.

	1974-75			1978-79			Change		
	Age 9	13	17	Age 9	13	17	Age 9	13	17
No response	3.1%	0.5%	0.5%	9.8%	0.6%	0.4%	6.7%*	0.1%	- 0.1%
Response option 1	21.5	21.1	19.1	17.9	16.9	17.2	- 3.7	-4.2*	- 1.9
Response option 2+	38.3	40.9	48.3	27.1	38.2	38.2	-11.2*	-2.7	-10.1*
Response option 3	13.5	18.8	13.9	15.3	20.5	20.1	1.8	1.7	6.1*
Response option 4	3.1	1.7	1.8	5.7	3.1	3.1	2.6*	1.4*	1.3*
I don't know.	20.5	16.9	16.3	24.2	20.6	21.0	3.7	3.6	4.7*

+ Correct response.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

In addition to recognizing well-known works of art, all students were asked several questions about the country of origin for works of art. Nine-year-olds had the greatest success in properly identifying a bronze ceremonial vessel from China (54%), exceeding the 13-year-olds (41%) and the 17-year-olds (45%). Other items called for identification of an early marble sculpture from Greece, a ceramic sculpture from Mexico and a bronze sculpture from Africa.

Students appear to have had difficulty making these distinctions between works from different cultures. Identifying the Greek and Mexican examples as Egyptian was a common mistake.



PLATE 11.



The example from China was most often judged to be from India; the African work was most often seen as Asian.

Additional questions calling for greater knowledge of art history were asked of 13- and 17-year-olds. In order to determine their level of acquaintance with well-known examples of particular styles, several questions similar to Figure 4-2 were presented. Students' lack of precision in stylistic identification is clearly seen in this example. In two related exercises, 55% of the 17-year-olds correctly identified *Mona Lisa* as a "Renaissance" painting from Italy, compared with 25% of the 13-year-olds.

Figure 4-2.

This painting is an example of what style of art?

	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Expressionism	23.4%	20.7%	-2.7%	25.4%	25.3%	-0.0%
Surrealism +	9.9	9.6	-0.2	15.7	16.3	0.6
Impressionism	11.4	13.0	1.6	12.0	11.4	-0.6
Futurism	21.8	27.7	5.9*	18.0	19.9	1.9
I don't know.	33.4	28.7	-4.6*	28.8	26.8	-1.9

+ Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or

% not responding.

Students at age 17 also were asked to determine which of several works were produced during the same period. The majority of students correctly identified well-known works from the same period.

Approximate chronological understanding was assessed through an exercise having a similar format. Given three works with a similar subject but from different periods, students were to identify the "oldest" and "newest." About one-eighth of the 13-year-olds and one-third of the 17-year-olds got both parts correct.

Seventeen-year-olds were given a number of exercises not administered to younger students. From just less than half to about three-fourths of the 17-year-olds correctly identified the social or cultural purposes of selected works of art. Techniques for representing three-dimensional space (as seen in Raphael's *The School of Athens*, for example) were correctly identified by 55%, and 67% correctly identified "wheel-throwing" as the common method employed to create three ceramic containers (Figure 4-4). Figure 4-3 illustrates one of several formats used to assess knowledge of the purposes of art.



PLATE 12.

FIGURE 4-3.

What was the main purpose of this building?

	Age 17		
	1975	1979	Change
To provide a meeting place for the making of laws	28.3%	25.8%	-2.5%
To provide a place for instruction and learning	8.2	5.8	-2.3*
To provide a temple for the statue of a goddess +	43.7	47.0	3.3
To provide a tomb for a dead ruler	3.0	4.5	1.5
I don't know.	16.8	16.6	-0.2

+ Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Figure 4-4 illustrates an assessment exercise to measure understanding of conventional forming processes and techniques.

FIGURE 4-4.

What one basic method of working with clay was used to make all three of the ceramic pieces shown on this and the next page?

	Age 17		
	1975	1979	Change
They were made with slabs of clay.	2.2%	2.0%	-0.2%
They were made with coils of clay.	15.2	15.9	0.8
They were turned on a wheel. +	65.4	67.0	1.6
They were cast in a mold.	8.7	8.0	-0.7
I don't know.	8.3	6.8	-1.6

+ Correct answer.

Figures may not total exactly due to rounding or % not responding.



PLATE 13.



PLATE 14.



PLATE 15.

In Summary



Results from this section of the assessment must be considered in relation to our expectations for students' intellectual understanding of art. About half of the 17-year-olds—less in the case of 9- and 13-year-olds—were able to answer questions acceptably. On the exercises administered to all three ages, scores increased substantially from age 9 to 13, and to a lesser degree between ages 13 and 17.

Students were more successful on exercises requiring identification of the country of origin for works than on those requiring recognizing well-known works of art. In addition, 17-year-olds were more successful in identifying the social or cultural function of works of art than in answering questions that treated chronology or called for a familiarity with the common names of historically significant periods or styles of art. For example, only 10% of 13-year-olds and 16% of 17-year-olds could identify "Surrealism" as the appropriate style name for the visual example shown—Salvador Dali's *The Persistence of Memory*. About one-fourth of the 13-year-olds could properly identify the *Mona Lisa* by country of origin (Italy) and historical period (Renaissance). About 55% of the 17-year-olds could do so. Better than 60% at ages 13 and 17 correctly identified

the *Mona Lisa* (daVinci) and *Moses* (Michelangelo) as works created within the same historical period.

Some factors associated with higher performance, particularly for 17-year-olds, are frequent museum visits, involvement in creating many kinds of art, taking four to six art classes and collecting art (three types). In schools where art is not taught, students perform well below the national average.

Both the low level of performance for all ages and the declines in performance demonstrate that knowledge about art history, particularly the Western heritage of art, is not a major topic in social studies or history classes—indeed, it appears not to be acquired by most students in either the home, community or school.

Chapter 5

Responding to Art: Perceiving, Describing, Analyzing and Judging

Through their art, humans create visual conceptions of themselves and their worlds—past, present and future—and of what is good and desirable. However, the visions and versions of reality contained within the visual arts are available only to those who can apprehend, understand and evaluate the features of individual works of art.

In the National Assessment, two major objectives were concerned with students' abilities to "perceive and respond to aspects of art" and to "make and justify judgments about the aesthetic merit and quality of works of art." In this chapter, students' responses to a series of tasks will be examined in order to illustrate just how sensitively and how effectively students are able to respond to and judge works of art. There are, of course, a series of more specific questions that might be asked about the nature of students' responses to works of art. They are:

1. To what features do students attend as they describe, analyze and judge works of art?
2. What are the developmental patterns in responding and judging between the ages of 9 and 17?
3. Do students with the greatest amount of art instruction respond differently and more satisfactorily than those with little art instruction?
4. Does the social, cultural, economic and experiential background of students affect the pattern of responding to and judging works of art?



5. Finally and most importantly, are students' responses to and judgments of works of art satisfactory? In other words, are school art educational programs successful in assisting students to respond sensitively to and judge the quality and merit of works of art?

Let us answer these questions through an examination of students' responses to a variety of tasks.

Describing and Analyzing the Features of Two Stylistically Different Paintings

Students in all three age groups were individually handed a card on which two colored postcard-sized reproductions of paintings had been mounted. Both paintings were of flowers. Painting A was a late 19th century work by Monticelli and Painting B was a Dutch 17th century work by Bollingier. The Monticelli painting was heavily impastoed and brightly colored; the image of the flowers was small in relation to the paintings' format and the flowers are suggested by the colors and textures of the paint rather than by being highly delineated. The Bollingier, on the other hand, contained highly delineated flowers that filled virtually the whole format. The colors of the Bollingier painting are far more subdued than those in the Monticelli work. The exercise instructions read: "Look at the two paintings on the handout. They were painted in very different ways. Give three ways Painting A was painted differently from Painting B."

Through experimentation with various ways of eliciting students' responses to works of art, it was found that asking them to describe specific differences between two works elicited longer, more complex and richer responses than

A.



PLATE 16.

B.



PLATE 17.

resulted by asking them to make general descriptions of a single work. Furthermore, the specific tasks led to a set of responses that provided a broad profile of descriptive and analytical responses.

Students' responses to the two paintings were analyzed through the use of eight classifications:

1. **Modal Character.** The response characterizes the works' overall mood or emotional qualities, e.g., "Number 2 makes me feel like I'm deep in a forest"; "The first one is dead"; "Number one is calm"; "It is freer"; etc.
2. **Style.** The response characterizes a work by using formal or informal style names, such as "impressionistic," "abstract," "realistic," "modern," etc.
3. **Color.** The response refers to the value and intensity of the colors, e.g., "Number one looks dull"; "The colors are more earthy"; "It is darker"; etc.

4. **Texture, Shape and Line.** The response refers to the surface quality of the painting ("chipped," "rough," "bumpy") or to shapes, marks, outlines or lines in the work, e.g., "It has some swirls"; "It does not have a definite line"; etc.
5. **Technique, Tools and Media.** The response refers to the tools and processes used to make the painting, e.g., "One is oil paints"; "The brush stroke is different"; "It was painted with short strokes"; etc.
6. **Formal/Relational.** The response makes statements about the design, structure, composition or formal relationships in the paintings, e.g., "Number one is arranged different"; "It does not have a real intricate design"; "More bunched together"; etc.
7. **Different Colors.** The response makes simple statements about the fact that the paintings are different color combinations.
8. **Unacceptable, Vague or Illegible Responses.**

Although students were asked to make three responses, this procedure was primarily a technique for eliciting longer and fuller responses than generally result from the request to make a single response. A satisfactory performance for the task was achieved when students:

1. Employed three of the criteria 1 through 7: "modal character"; "style"; "color"; "texture, shape and line"; "technique, tools and media"; "formal/relational"; or "different colors"; and when one response was "modal character" or "formal/relational."

or

2. Three different "formal/relational" responses.

or

3. Two "formal/relational" responses and one other category 1 through 7 classification.

Each instance of the use of each classification was noted, regardless of whether it occurred in the first, second or third response.

Table 5-1 shows the percentage of students in each age group who performed satisfactorily.

TABLE 5-1. Percentages of Students Performing Acceptably on "How Two Paintings Were Painted Differently" Exercise, 1974-75 and 1978-79

	1974-75	1978-79	Change
Age 9	6.0%	7.3%	1.3%
Age 13	21.8	21.3	-0.6
Age 17	31.6	30.1	-1.4

Figures may not total exactly due to rounding or % not responding.

In determining the acceptable level of response, considerable emphasis was placed on giving a variety of reasons or upon giving active analytical responses to compositional differences. Although only about 30% of the 17-year-old students gave acceptable responses, there was a steady progression from age 9 to age 17. The findings from both assessments are virtually the same; none of the changes is statistically significant.

It is interesting to note that in 1979, 17-year-olds who have taken four to six art classes performed no differently than the national average.

Only a small percentage of students in each age group achieved a satisfactory level of achievement. The picture appears somewhat brighter when one examines the percentages of students who employed at least one of the acceptable criteria at least once (Table 5-2).

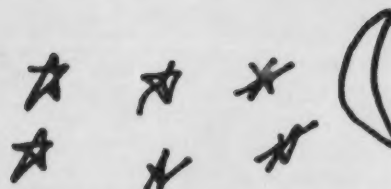


TABLE 5-2. Percentages of Students Giving Each Category of Explanation of How Two Paintings Were Painted Differently

Classification (At Least One Time)	1974-75 Age			1978-79 Age			Change Age		
	9	13	17	9	13	17	9	13	17
1. Modal character	6.5%	19.2%	26.8%	7.6%	18.6%	25.1%	1.1%	-0.6%	-1.7%
2. Style	7.2	23.4	38.4	9.0	22.6	38.7	1.8	-0.7	0.3
3. Color	32.7	45.4	46.1	32.6	37.5	46.0	-0.1	-7.9*	-0.0
4. Texture	13.0	29.8	35.5	13.6	30.6	38.2	0.6	0.7	2.7
5. Technique	15.7	45.6	58.1	20.7	50.3	56.7	5.0*	4.7*	-1.3
6. Formal relational	3.7	9.7	11.9	4.5	8.3	11.2	0.8	-1.4	-0.8
7. Different colors	21.2	17.6	11.3	22.2	19.2	11.1	1.0	1.6	-0.2
8. Unacceptable	85.9	60.7	41.1	84.4	64.1	39.3	-1.6	3.4	-1.9

Figures may not total exactly due to rounding or % not responding.

Classifications 3 and 7, dealing with specific and general responses to color, were used more frequently than any others. Classification 5, dealing with media and technique (the features ostensibly called for in the task) were employed next most frequently. The high-level synthesizing responses (classification 1) and analytical and structure responses (classification 6) were employed least frequently by all age groups. Nevertheless, they were employed, and employed more frequently with age.

It is also worth noting that if using only any two acceptable classifications were considered to be a satisfactory level of achievement, then in 1978-79, at least 29% of the 9-year-olds, 62% of the 13-year-olds and 76% of the 17-year-olds would have performed satisfactorily.

But what of the level of performance when considered in light of the criteria presented in Table 5-1? Nine-year-olds were not expected to score highly and they did not. Many of their responses were classified as unacceptable, vague or illegible. They did make numerous responses to color and technique, and as a group used all of the classifications.

For 13- and 17-year-olds, most of whom have taken at least some art from a teacher trained specially to teach it, the results are disappointing to the art educators who helped write this report. The most troublesome finding of all is that students with four to six secondary school art classes—those students who have elected to take the greatest amount of art instruction—perform at the same level as all other 17-year-old

students. It is possible to speculate that art instruction has little effect upon the way students respond to works of art and that the differences occurring between ages 9 and 17 result from the general development of perceptual, cognitive and writing abilities rather than from specific art instruction.

Recognizing the Theme, Main Idea and Principal Features of Works of Art

Whereas students were generally unsuccessful in describing the various features of works of art, many could quite readily

recognize features that had been named for them, match two similar works of art and select from a list the themes and principal ideas of works of art.

For example, students were shown five works of art and given these tasks:

Open the foldout. Look at the painting on this page and the four paintings on the foldout. "Theme" refers to the basic subject of a work of art. The "theme" of the painting on this page is MOST like which ONE of the paintings on the foldout? Fill in only ONE oval.



PLATE 18.



PLATE 19.

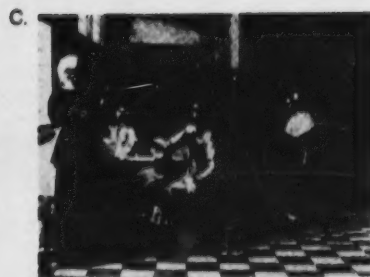


PLATE 21.



PLATE 20.



PLATE 22.

	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Painting A	4.7%	5.1%	0.4%	2.6%	2.7%	-0.0%
Painting B	10.5	11.0	0.5	3.8	3.5	-0.3
Painting C†	60.7	59.6	-1.2	69.9	71.1	1.3
Painting D	16.3	14.3	-1.9	17.7	15.8	-1.9

†Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Open the foldout. Look at the four paintings on the foldout. The "composition" of a work of art refers to the way shapes are arranged. Which one of the four works of art on the foldout has a "composition" that is MOST DIFFERENT from the other three? Fill in only ONE oval.



PLATE 23.



PLATE 24.



PLATE 25.



PLATE 26.

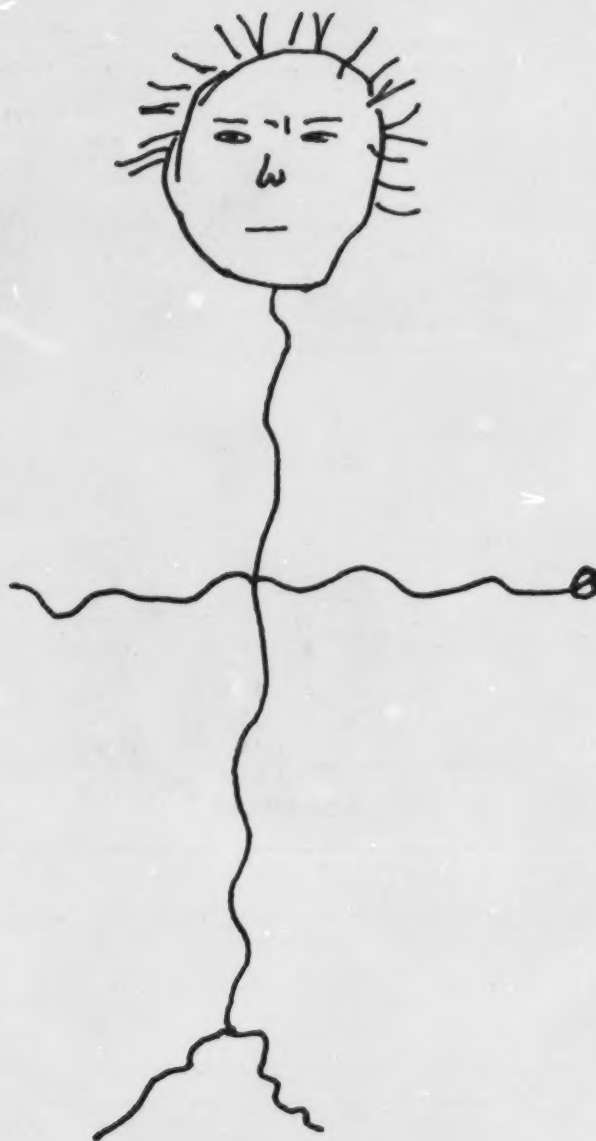
	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Painting A	5.4%	6.9%	1.5%	4.2%	3.3%	-0.9%
Painting B	5.1	4.3	-0.8	3.0	3.6	0.6
Painting C†	79.5	78.1	-1.3	86.8	87.9	1.1
Painting D	8.4	9.0	0.5	4.9	3.9	-0.9

†Correct answer.
 *Significant at the .05 level.
 Figures may not total exactly due to rounding or % not responding.

.. In 1978-79, approximately 60% to 70% of the teenagers matched the qualities of similar works. Even more appear able to select the one work that is most different from among a group of four.

What do these results tell us about art education and about students' capabilities? Since 17-year-olds who have taken four to six art classes and 13-year-olds who have taken two art classes perform no differently from the average of students in their age groups, there is reason to believe that the matching and identifying skills are general in nature and not highly affected by art instruction.

Three exercises assessed students' skill in recognizing main ideas in artworks. In each they were presented with a work or works and then asked to select from a list the statement that best characterized the main idea of the works. (Only two of the three items are illustrated.)



Look at the works of art on the next page. The MAIN IDEA of these two works of art is similar because they both show

	Age 9			Age 13			Age 17		
	1975	1979	Change	1974	1978	Change	1975	1979	Change
People	18.9%	14.5%	-4.4%*	19.9%	18.1%	-1.8%	16.1%	12.0%	-4.1%*
Slavery	6.1	4.9	-1.3	5.5	5.0	-0.6	4.6	3.6	-0.9
War†	56.6	57.8	1.2	62.7	63.8	1.1	67.3	72.4	5.1*
Weapons	7.9	7.7	-0.1	6.3	7.5	1.2	6.3	5.9	-0.4
I don't know.	9.1	14.6	5.5*	5.3	5.4	0.1	5.4	5.7	0.3

†Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.



PLATE 27.



PLATE 28.

Which statement best describes the MAIN IDEA shown or expressed by everything in the painting?

1. There is a violent, uneasy feeling about the picture.
2. The house is in a bad rain storm.
3. The tree that bends will make it through the storm.
4. Birds are being blown in a storm.
5. I don't know.



PLATE 29.

	Age 9			Age 13			Age 17		
	1975	1979	Change	1974	1978	Change	1975	1979	Change
Response option 1†	26.7%	27.6%	0.8%	50.9%	48.4%	-2.5%	67.3%	62.6%	-4.7%*
Response option 2	60.5	56.1	-4.4	43.0	46.1	3.1	29.0	32.9	3.8
Response option 3	2.2	2.7	0.5	1.4	1.1	-0.3	1.7	1.5	-0.2
Response option 4	2.1	1.4	-0.7	1.3	0.9	-0.5	0.2	0.5	0.3
I don't know	7.9	11.1	3.2*	3.3	3.5	0.2	1.7	2.2	0.5

†Correct answer.
 *Significant at the .05 level.
 Figures may not total exactly due to rounding or % not responding.

The exercise not illustrated shows a print of Harriet Tubman leading blacks out of slavery, which is the main idea of the print.

Apparently, students—especially the two older groups—are frequently able to select the main idea of a work of art from a list of four. The pattern of responses to the Burchfield watercolor is interesting because the 9-year-olds tended to select the accurate but literal statement about the storm and the 13- and 17-year-olds more frequently chose the general response that characterizes the expressive quality of the painting. This pattern of responding is indeed gratifying.

Making and Justifying Judgments About the Aesthetic Merit and Quality of Works of Art

Why should young people learn to make sensitive and reasoned evaluations of works of art? Justifications can range from the high minded (e.g., "the best works of art contain the most profound visions of mankind"), through the sensuous reasons (e.g., "the best works of art are the source of the greatest amounts of aesthetic pleasures"), to the practical (e.g., "people should learn to detect the ways that advertisers use aesthetic features to control human behavior"). Implicit within each of these

three positions is the assumption that the ability to make good aesthetic judgments contributes much to individuals' well-being.

But does art education contribute to young peoples' abilities to make judgments about works of art? Do they apply appropriate criteria? Do they recognize the differences between adequate and inadequate criteria? Do young people in the United States make reasoned judgments of works of art? These are the questions to be answered in this section.

A Comparative Evaluation of Two of Picasso's Drawings of Horses: Judgments and Justifications

Students in all three age groups were given reproductions of two of Picasso's drawings of horses, both of which were preliminary sketches for his painting, *Guernica*. They were asked to: Look at the two drawings on the next page. Which drawing do you judge to be the better work of art? Fill in only ONE oval.

	Age 9			Age 13			Age 17		
	1975	1979	Change	1974	1978	Change	1975	1979	Change
Drawing A	19.2%	18.1%	-1.2%	8.6%	8.0%	1.4%	3.8%	3.6%	-0.2%
Drawing B	79.8	79.9	0.1	92.7	91.4	-1.3	96.0	94.0	-2.0

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Give two reasons why you think the drawing you selected is the better work of art.

A.



PLATE 30.

There are several features of this exercise that need to be noted. (1) As with the descriptions of the paintings of flowers, it was determined (through trying out various procedures) that giving students works to compare, rather than a single work, elicited richer and more complex justifications. (2) There was no desire to pit one artist against another; thus, two works by one artist were used. (3) One of the drawings was not assumed to be aesthetically better than the other. (4) The actual work selected as the "better work" is immaterial (although these data are reported). Getting students to take a judgmental

B.



PLATE 31.

stand was a technique employed to get students to justify their judgments. (5) Two responses were required merely to elicit longer, more varied justifications. There was no penalty for not giving two responses.

Results shown for the work thought to be the better work of art indicate that an overwhelming number of students in all three age groups selected drawing B as the better work of art, although the younger students tended to select drawing A more frequently than the older students.

The selection of the more realistic, dramatic, complex and active horse drawing was expected. The question was whether or not students would justify their judgments on the basis of (1) the organic unity of the components of the entire work and (2) the vividness, intensity and expressive quality (feeling or mood) of the total drawing—not just of the activity of the horse.

The judgmental justifications were placed into eight major classifications:

1. Relationship of Parts and Unity of the Drawing. The response refers to ways aspects of the work relate to each other or how the drawing is unified or designed, e.g., "It's arranged good"; "It has more complex designs"; "It is not just plain"; "Body proportions are good"; etc.
2. Feeling and Mood. The response refers to emotional quality of the work, its expressiveness and communicative qualities, e.g., "The second picture looks more sickful"; "It shows emotion"; "Because it shows meaning"; "It shows a more vivid sense of imagination"; etc.
3. Technical Achievement. The response comments about the skill involved in the work, e.g., "The first one is sloppy"; "It shows more knowledge of how to draw"; "It has more sketching"; "It took more time to draw"; etc.
4. Action of the Horse. The response refers to the expressiveness of action and emotion of the horse, e.g., "Because it looks like the horse is moving"; "It shows the horse struggling"; "The horse is wild"; "The horse broke its leg"; etc.
5. Imitation of Reality. The response based on the degree of realism or naturalism of the horse, e.g., "It looks more like a horse"; "It has more detail"; "You can tell what it is more quickly"; "The details are more authentic"; etc.
6. Age, Experience or Status of the Artist. The response refers to presumed youth of the artist, e.g., "It looks like first grade work"; "It was done by someone more experienced"; "It shows more talent"; etc.
7. Naming Features. The response simply lists various features of the drawings, e.g., "The head is good"; "The mouth is dirty"; "It's got lots of lines"; etc.
8. Miscellaneous and Uninterpretable.

An acceptable response to the exercise was to justify either a positive or negative judgment on the basis of (1) the relationship of parts and unity or (2) the feeling or mood of the drawing. The third classification, technical achievement, was considered to be a valid reason but not sufficient by itself to be considered an acceptable justification for considering the work to be the better one; the remaining classifications were not considered acceptable justifications.



Table 5-3 shows that in 1978-79 almost one-fifth of the 9-year-olds could provide an acceptable justification; over one-third of the 13-year-olds and about one-half of the 17-year-olds could do so. These findings seem quite satisfactory.

TABLE 5-3. Percentages of 9-, 13- and 17-Year-Olds Providing Acceptable Aesthetic Justifications for Judging One Horse Drawing To Be Better Than Another, 1974-75, 1978-79

	1974-75			1978-79			Change		
	Age 9	Age 13	Age 17	Age 9	Age 13	Age 17	Age 9	Age 13	Age 17
Relational/unity or feeling/mood response	10.8%	36.3%	52.4%	19.4%	34.5%	49.7%	8.6%*	-1.8%	-2.7%

*Significant at the .05 level.

Half of the older students accomplished the task, and there was a steady progression in achievement from age 9 to age 17. Moreover, there was improvement in the 9-year-olds' percentage from 1975 to 1979 by a remarkable 8.6 points.

These findings need to be qualified in two ways, however. First, regarding the feeling and mood classification, it was often impossible to tell from a student's response whether the reference was to the horse or to the drawing (a reference to the actions of the horse alone would be the basis for classifying the response in [4] "actions of the horse.") If the referent—the drawing or the horse—was ambiguous, then students were given the benefit of the doubt and the response was placed in the more general (and acceptable) classification. Thus it is possible that the acceptable-level data are somewhat inflated.

The second qualification is even more serious. While sizable numbers of students appeared to be employing acceptable judgmental criteria, even greater numbers were employing unacceptable criteria. Table 5-4 shows the percentages of students employing each of the criteria. Approximately 60% of 13- and 17-year-olds used the highly unacceptable mimetic criterion in which they judged the work on the basis of how "true-to-reality" it appeared to be. Other unacceptable criteria were also used frequently. The major conclusion to be drawn from the exercise is that students used both appropriate and inappropriate judgmental criteria indiscriminately.



TABLE 5-4. Percentages of 9-, 13- and 17-Year-Olds Employing Each Type of Judgmental Criterion

	1974-75			1978-79			Change		
	Age 9	Age 13	Age 17	Age 9	Age 13	Age 17	Age 9	Age 13	Age 17
ACCEPTABLE									
1. Relationship of parts and unity	0.9%	7.8%	12.1%	1.4%	4.8%	10.4%	0.5%	-3.1%*	-1.7%
2. Feeling, mood	9.9	31.1	45.9	18.1	31.3	44.2	8.2*	0.2	-1.6
LESS ACCEPTABLE									
3. Technical achievement	17.9	19.6	17.4	17.6	21.0	18.1	-0.3	1.4	0.6
UNACCEPTABLE									
4. Actions of horse	10.5	19.1	21.2	10.8	18.3	18.4	0.3	-0.8	-2.8*
5. Imitation	33.2	59.1	65.3	34.5	60.9	61.3	1.2	1.7	-4.0*
6. Age, experience or status of artist	6.7	13.1	16.1	7.4	12.3	17.0	0.6	-0.8	0.9
7. Naming features	12.4	11.7	8.4	16.8	11.0	5.3	4.4*	-0.6	-3.1*
8. Miscellaneous	56.2	33.0	19.4	53.7	34.1	23.0	-2.5	1.1	3.6*
9. I don't know.	2.8	1.3	1.1	2.4	1.0	0.4	-0.4	-0.3	-0.7*

*Significant at the .05 level.

Figures may not total exactly due to rounding.

One other question needs to be asked: Do students who have received the most art instruction make more reasoned judgments than those with little or no art instruction? In 1979, 17-year-old students who had taken only one art class scored 8.1 percentage points below the national average—a significant difference; students who had taken four to six secondary school art classes scored only 3.3 points above the national average—not a significant difference. But why does advanced art instruction have so little effect on students' judgmental abilities? Is it the case that art teachers do not make verbal judgments of their students' artworks? Are students neither taught nor encouraged to make aesthetic judgments? Or is there no relationship between students' hearing judgments and learning to make them themselves? The National Assessment data do not answer these questions. Nevertheless, the questions need to be raised if students are to be taught to go beyond the culturally pervasive, but

still unjustifiable, practice of judging a work of art on the basis of its close correspondence to objects in the so-called "real" world.

Judgments Made About an Advertising Design

Writing justifications for judgments of works of art is admittedly a difficult task, especially when one must determine the judgmental criteria by oneself. How satisfactorily do students perform when asked to make judgments and then to apply criteria that have been provided for them? To find out, the students were asked to judge an advertisement for wigs. The advertisement was selected for use in the assessment because it was judged to be decidedly inferior—incoherent and unexciting in design. Since the design may be used in another assessment, it cannot be shown here; however, a brief description should suffice. At the top of the advertisement is written in letters of two sizes, "Special This Week!

Marcella Wig \$29.88." In the bottom right quarter is a curious grouping of three various sized drawings of "cute" female heads, wearing wigs, one supposes. The name of the wig boutique and the styles and prices of four other wigs are literally scattered at five different oblique angles and in different typefaces throughout the format.

There were two exercises relating to the wig advertisement. In the first, students in all three age groups were asked to make a series of judgments of particular features of the advertisement. Specifically, they were asked to judge the placement of the words, how well the different typefaces went together, the way the women were drawn and grouped together, and the way the ad attracts attention and gets its message across.

For each question, the preferred response was "not good at all." Nevertheless, it was felt that those who thought that the women were well drawn and well grouped could not be faulted for their opinions. Thus, satisfactory performance was based on judging that at least two of the features were "not good at all." Sixteen-and-a-half percent of the 9-year-olds, 19% of the 13-year-olds and 24% of the 17-year-olds achieved a satisfactory level of performance.

These additional comments may be made about the responses to the exercise:

1. Older students were less likely to praise the advertisement.
2. The "Just OK" classification was used far more frequently than any other classification, indicating a luke-warm response, even though there was a reluctance to condemn the advertisement.

3. The feature most praised (by at least 70% of each group) was the way the women are drawn.

The results for the second exercise associated with the advertisement were more encouraging than those for the first. In this exercise, students were asked to look again at the advertisement and to make a judgment as to the quality of the overall design.

Table 5-5 shows the responses to this question.

TABLE 5-5. 9-, 13- and 17-Year-Olds' Judgments of the Overall Design of the Wig Advertisement

	Age 9	Age 13	Age 17
Very good	47.2%	26.6%	22.5%
Just OK	36.9	64.0	66.5
Not good at all	9.5	8.1	9.7
I don't know.	5.7	0.9	0.6

Figures may not total exactly due to rounding

The small number of 13- and 17-year-olds maintaining that the design is very good is commendable (over 70% think otherwise), and 9-year-olds can surely be forgiven for their lack of astuteness.



Judgments Made About Paintings by Klee, Gorky, DeKooning and Henri

Now that we have seen the nature of judgments made about an inferior advertising design that contained mediocre drawings of attractive women, it is instructive to turn our attention to judgments made regarding a series of four fine paintings of women. In these paintings by Klee, Gorky, DeKooning and Henri, the compositions are solid, the colors range from subtle to vibrant and dissonant, the contrasts of shapes are unusual and the looks of three of the four women in the paintings are definitely not "appealingly cute." Rather, the Klee woman's face gives the appearance of "scrimching," the DeKooning woman appears almost snaggle-toothed and the features seem rubbed out. The Gorky woman appears tight-lipped, sunken-eyed, gaunt and homely. The young woman in the Henri painting is fresh, rosy-cheeked and pleasant looking.

In the advertising design, students in all age groups were positively influenced by its "appealingly cute" drawings of women. In three of the four other paintings of women, would students be able to go beyond the apparent "ugliness" of the subject matter to judge the paintings on the basis of their vividness, intensity and organic unity? The data in Table 5-6 seem to indicate that students could not easily transcend the look of the subject matter in order to make broadly based, reasoned judgments of the aesthetic quality and merit of the works.

After making a series of specific judgments about particular features of each work, students were asked to judge the quality of the whole painting.

TABLE 5-6. Percentages of 9-, 13- and 17-Year-Olds' Judgments Made About Paintings by Klee, Gorky, DeKooning and Henri, 1978-79

	Age 9	Age 13	Age 17
KLEE			
Very good	22.7%	12.2%	14.8%
Just OK	45.7	56.6	41.4
Not good at all	25.5	28.6	42.0
GORKY			
Very good	48.2	36.8	14.5
Just OK	36.5	50.1	61.8
Not good at all	11.6	11.8	22.4
DeKOONING			
Very good	10.3	6.9	3.3
Just OK	31.7	42.6	21.4
Not good at all	52.6	46.5	73.2
HENRI			
Very good	33.7	52.9	37.1
Just OK	44.8	39.3	50.7
Not good at all	16.8	5.7	10.8

Figures may not total exactly due to rounding or % not responding.

Fewer than half of the students were willing to claim that any of the works were very good; even the Henri received only a 53% endorsement as very good.

Advanced art instruction also seemed to have little effect on the judgments made about the four works. Seventeen-year-old students with four to six art classes responded in essentially the same manner as all other 17-year-olds.

It is interesting to note that students do seem to make a distinction between judgments and preferences; more are willing to judge the works as very good than are willing to say that they would enjoy looking at the works again and again. Seventeen-year-old students with four to six art classes rejected the four works with nearly the same frequency as other 17-year-olds.

Nine-year-olds appear to accept more readily the deviation from realism reflected in these portraits. In all probability this is a function of their relative lack of exposure to the pervasive cultural norm that equates art with nature. The overriding conclusion that must be drawn from performance on this series of exercises is that students are generally unable to go beyond the nature of literal elements in order to make judgments on the basis of formal characteristics and expressive content. In other words, if a work of art has disconcerting subject matter, it is a bad work of art.

Surely specific art teaching relating to the use of appropriate and inappropriate judgmental criteria would have a positive effect on the judgmental abilities of students. If this is true, there is little evidence from the National Assessment data that such instruction is being provided.

Knowing and Understanding the Criteria for Making Aesthetic Judgments

We have already seen that students are not especially adept at actually generating and employing reasoned aesthetic judgmental criteria, nor do they focus upon pertinent features of works of art as they make their judgments. The question remaining is "Do students discriminate between appropriate and inappropriate judgmental criteria?"

All three age groups were shown this print by Jean Charlot and then asked:

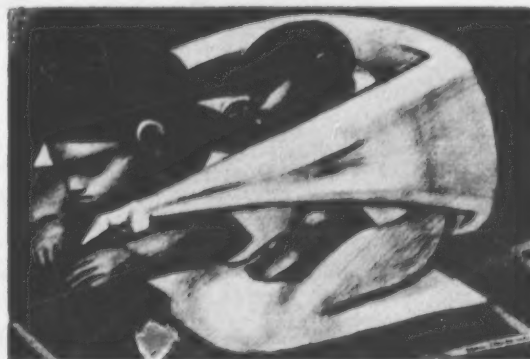


PLATE 32.

What is the BEST reason for judging this print to be a good work of art?

	Age 9			Age 13			Age 17		
	1975	1979	Change	1974	1978	Change	1975	1979	Change
It has a number of circular shapes.	11.3%	10.9%	-0.4%	11.2%	9.8%	-1.4%	7.8%	8.3%	0.5%
It has a powerful design.†	28.5	23.8	-4.7*	45.2	47.7	2.5	55.5	53.8	-1.7
It has a mother and child.	31.9	38.7	6.8*	14.0	12.8	-1.1	6.9	7.3	0.4
It has light and dark lines.	13.2	14.1	0.9	22.9	23.9	1.0	16.0	16.2	0.3
I don't know.	14.8	11.6	-3.2*	5.6	5.7	-1.0	13.8	14.0	0.1

†Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Nine-year-olds were more likely to select the subject-matter criterion than the two older groups. The 13- and 17-year-olds, however, selected the correct nature-of-the-design criterion more frequently than any other choice. It is surprising to note, nevertheless, just how many students thought that the mere presence of circular shapes or light and dark lines was sufficient reason to claim that the work is good.



In a second select-the-best-criterion exercise, students were asked:

The ONE best reason for saying that a painting is good is because

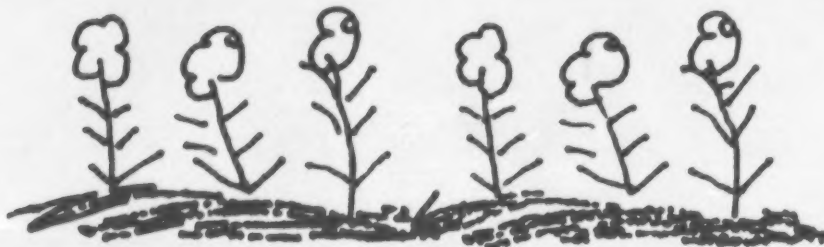
1. It is organized in a pleasing way.†
2. It took a long time to make.
3. everybody likes it.
4. a famous art museum bought it.
5. I don't know.

Age 9			Age 13			Age 17		
1975	1979	Change	1974	1978	Change	1975	1979	Change
1. 33.8%	38.6%	4.9%	61.5%	62.4%	0.9%	72.1%	72.2%	0.1%
2. 18.2	22.8	4.6*	3.7	5.1	1.3	1.9	2.4	0.5
3. 22.1	9.6	-12.5*	21.0	18.5	-2.4	13.6	12.6	-1.0
4. 9.8	6.0	-3.9	6.0	5.1	-0.9	2.9	3.4	0.5
5. 15.7	22.6	6.9*	7.6	8.9	1.3	8.6	9.2	0.6

†Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.



The results show that when given blatantly inappropriate criteria students are highly likely to select the relationship of parts—the organicistic criterion. It is still a bit disconcerting to see that 13% of the 17-year-olds believe that if everybody likes something, it must be good.

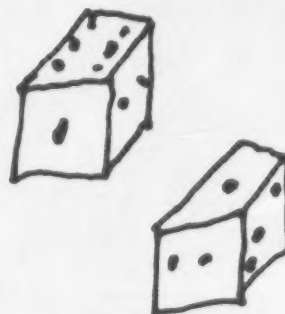
In Summary

And now to return to the questions asked at the beginning of the chapter:

1. To what features do students attend as they describe, analyze and judge works of art? Students of all ages tend to respond to works of art on the basis of subject matter. They do attend to color, but not much to other sensory aspects or to formal, expressive or relational aspects. In other words, they seem to approach works of art from a narrow point of view, making it difficult, at best, for them to adequately describe, analyze or judge works of art.
2. What are the developmental patterns in responding and judging between the ages of 9 and 17? On almost all exercises reported in this chapter, 13-year-olds outperform 9-year-olds, and 17-year-olds perform highest of all. Responses to the tasks indicate students' generally increasing ability to respond to works of art. The differences are most notable between ages 9 and 13.
3. Do students with the greatest amount of art instruction respond differently and more satisfactorily than those with little art instruction? On only a few occasions did 17-year-old students with four to six classes in art instruction perform more satisfactorily or differently than other 17-year-olds. This finding raises interesting questions about the nature of high school

art instruction and the characteristics of students who elect to take many art classes.

4. Does the social, cultural, economic and experiential background of students affect the pattern of responding to and judging works of art? Whereas school art education does not seem to affect highly the way students respond to art, students of well-educated parents, students who visit museums and students who do art at home respond more satisfactorily than other students.
5. Finally and most importantly, are students' responses to and judgments of works of art satisfactory? Students' responses to works of art are much more narrow, shallow and uninformed than seems desirable. Indeed, students' unwillingness to engage works openly and to explore a wide range of their features probably means that paintings, sculpture, prints and drawings are not able to convey their important meanings and realities, nor their pleasures, to many young Americans. It seems reasonable to conclude that works of art—in fact, all visual phenomena—will remain as "closed books" unless measures are taken to teach these judgment skills in our schools.



Chapter 6

Design and Drawing Skills



The primary focus of art education at all levels of schooling is upon providing art-making experiences. Embedded within such experiences is the development of skills required for artistic expression and communication. The objectives that guided construction of exercises to assess the extent to which expressive skills have been developed are listed under Objective III and are concerned with producing works of art (see Appendix A for objectives). These include producing original and imaginative works of art; producing works with a particular composition, subject matter, expressive character or expressive content; producing works which contain various visual conceptions; and demonstrating knowledge and application of media, tools, techniques and processes.

Four exercises were developed to assess student abilities in relation to these objectives. While it was impossible to examine every facet of artistic behavior in the assessment, the four exercises used were sufficiently comprehensive in scope to reflect many of the goals and objectives under "Produce Works of Art."

Producing an Original Design

To sample skills in creating imaginative works of art, students at ages 9, 13 and 17 were allotted from approximately four to five minutes to create a necklace on an existing outline drawing (shown below) in response to the following directions.

Jewelry that is worn around the neck comes in many shapes and sizes. Some jewelry is very ordinary-looking and some is very unusual. Pretend you are a jewelry designer. Around the neck of the woman shown on the next page, draw the most unusual piece of jewelry you can imagine.

Acceptable levels of performance for designing a necklace were estimated by identifying within the drawing either (a) both unusual objects and a novel combination of objects and/or themes, or (b) either an unusual object or novel combination, along with either a cohesive design or a design fitting the space.

Almost 100% of the students in both assessments produced a response that was ratable. Drawings were assessed on the basis of the presence or absence of seven characteristics concerned with the novelty, sensitivity, coherence and functionality of each design (Exhibit 6-1). Examples of drawings that reflect the presence or absence of at least one of the seven pivotal criteria used to assess these exercises are produced in Appendix B; comprehensive explanation of the scoring, along with many more examples, appear in *The Second Assessment of Art, 1978-79: Released Exercise Set* (1980), available from the National Assessment.



EXHIBIT 6-1. Scoring Criteria for Necklace Exercise

Functionality of the necklace

- Position: Could the necklace actually hang on the neck in this position?
- Roundness: Does the necklace appear to follow body contours?
- Partial roundness: Does a major portion of the necklace conform to body shape while the total necklace does not?

Integration of the necklace, i.e., the way the elements of the necklace cohere and the way the necklace functions within the neck and upper chest format

- Coherence/consistency: Does the piece have three elements that function together coherently?
- Necklace fits space: Does the piece fit comfortably within the neck and upper chest area?

Imaginativeness of the necklace

- Unusual objects: Does the necklace contain one or more unusual objects or forms?
- Novel combination: Does the necklace contain objects or forms combined in a novel or unusual manner?



While almost every student produced a drawing, only a minority created a necklace design that was cohesive and/or novel. This task was especially difficult for 9-year-olds, as the summary figures in table 6-1 illustrate.

TABLE 6-1. Percentages of 9-, 13- and 17-Year-Olds Successfully Designing Necklace, 1974-75, 1978-79

	Age 9			Age 13			Age 17		
	1974-75	1978-79	Change	1974-75	1978-79	Change	1974-75	1978-79	Change
Acceptable necklace drawing	3.9%	2.4%	-1.5%	12.7%	13.7%	1.0%	16.1%	19.7%	3.6%*
Unusual object in the design	4.5	2.7	-1.8*	10.8	13.3	2.5	13.7	18.9	5.2*
Novel combination of objects	3.4	2.0	-1.4	8.9	9.5	0.6	9.8	10.4	0.6

†Correct answer.

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

These figures are not surprising, given the fact that this exercise primarily assesses production of novel responses. Such responses, by definition, are the exception and not the rule. What is surprising, at least initially, is the apparent superiority of older students in relation to variables associated with imaginative responses. Using one's imagination is assumed to be a characteristic of younger children because of their lower level of acculturation and lack of inhibitions. Being less inhibited, however, does not appear to manifest itself in greater use of imagination when one is required to respond to a specific task. Variables associated with knowledge and skill acquired through increased

maturity and higher levels of education affect production of original works in relation to some prescribed task. Certainly, the research on creativity conducted during the 1960's would support this conclusion.

The steady increase in the ability to create imaginative and original designs may well be a reflection of the greater opportunity to work with art specialists enjoyed by 13- and 17-year-olds. The ability to produce a cohesive design which fits a given space appears to be another skill which is related to greater opportunities for art education experience. However, as Table 6-2 reveals, that skill is declining, especially for older students.

TABLE 6-2. Percentages of Students Creating Cohesive Necklace Designs That Fit the Space, 1974-75, 1978-79

Age 9			Age 13			Age 17		
1975	1979	Change	1974	1978	Change	1975	1979	Change
4.5%	2.3%	-2.2%*	15.3%	14.2%	-1.1%	25.6%	20.5%	-5.1%*

*Significant at the .05 level.

The notion that greater exposure to art education significantly affects abilities to design imaginatively and coherently is given further support by the figures reporting results for students taking more than one art class (see Table 6-3). However, again there have been changes in this regard. In 1975, students with more art classes held a 14% advantage over those who took only one art class in creating an unusual object and in producing novel combinations and a 11% edge in creating a cohesive design that fits the space. In 1979, they lost their advantages in creating unusual objects and novel combinations but had a significant advantage in cohesive designs fitting the space.



TABLE 6-3. Percentages of Success on Necklace Drawing for 17-Year-Olds Taking Art Classes, 1975 and 1979

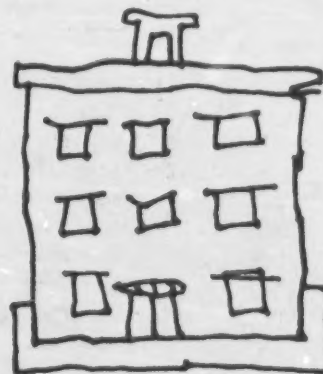
	1 Art Class		4-6 Art Classes		Advantage for Students Taking 4-6 Classes	
	1975	1979	1975	1979	1975	1979
Creating unusual object	10.7%	19.0%	24.6%	24.7%	13.9%*	5.7%
Producing novel combinations	6.1	9.5	19.9	14.3	13.8*	4.8
Creating cohesive design that fits space	26.7	19.5	37.6	31.9	10.9	12.4*

*Significant at the .05 level.

Art education experiences provided by visits to art museums also appear to be related to abilities to design imaginatively and coherently.

TABLE 6-4. Percentages of Success on Necklace Drawing by Number of Visits to Art Museums, 1978-79

	Unusual Object	Novel Combination	Cohesive Design That Fits Space
Age 9			
All students	2.7%	2.0%	2.3%
1 visit	2.0	3.1	2.2
5 or more visits	3.9*	1.4	3.6*
Age 13			
All students	13.3	9.5	14.2
1 visit	11.9	7.1*	12.5
5 or more visits	16.3*	10.9	17.6*
Age 17			
All students	18.9	10.4	20.5
1 visit	16.2*	7.9*	18.2
5 or more visits	21.1*	13.3*	23.0*



It may be inferred from these data that art museum visitation coupled with only sporadic art experience offered in many elementary schools does not result in the productive combination occurring at the secondary level, which can be inferred from these data.

Fluency of Ideas for Producing Art

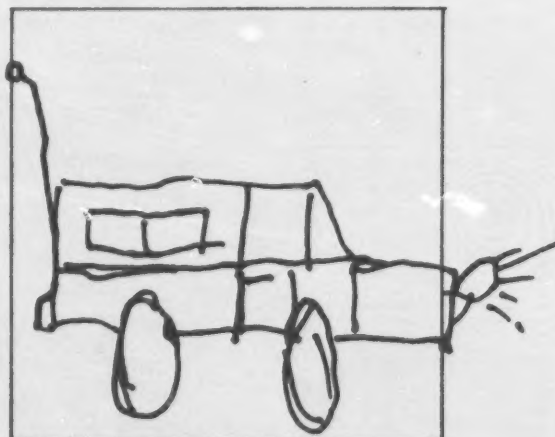
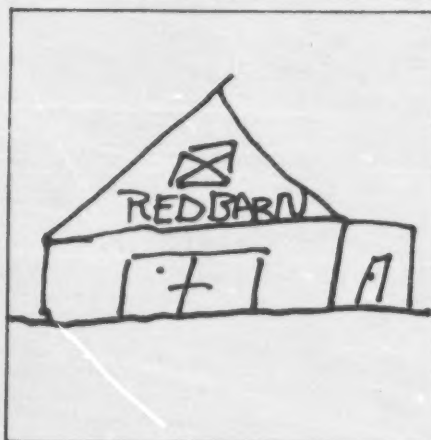
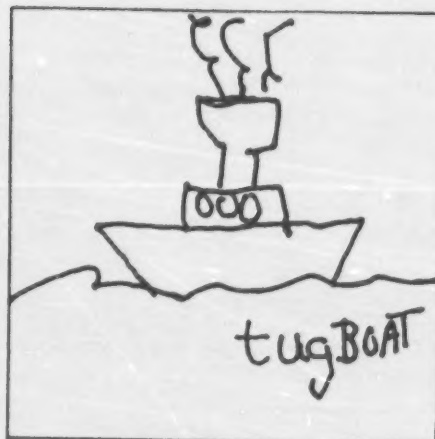
Nine-, 13- and 17-year-olds were asked to produce sketches for paintings to sample their skill in generating and expressing a variety of visual ideas. Students were given approximately seven minutes to respond to the following directive:

In the boxes on the next page, make 6 quick sketches of ideas for paintings you might like to make if you had time. Try to make each sketch very different from the others. Don't worry too much about how your sketches look, because it is more important to show ideas.

Each box was scored for a number of characteristics. (See Appendix C for a complete description.) First each nonblank box was marked as scorable or not scorable, where not scorable meant only random marks and scorable means everything else. For each scorable box it was determined whether the box contained a single object, two or more unrelated objects or a theme. Sketches in which the drawing went beyond the basic structure and components with shading, highlights, textures, motion lines, etc., were scored as exhibiting elaboration.

Each object in a sketch was placed in 1 of 14 categories—for example, human figure, animal, land vehicle, building, etc. Themes in sketches were also placed in categories, e.g., landscape, sports, war, and so on.

The sketches were then described as either inventive, cartoon-like, message oriented, sexual, humorous, conflict oriented, facile or being a scribble drawing.



Finally, all sketches produced by a student were scored in terms of whether or not each sketch differed from all others on the page. Sample responses and their scores appear in Appendix C.

The exercise was considered to be successfully completed if one of the following criteria was met:

- Six different sketches or five different sketches with at least one characterization other than a cartoon or scribble drawing.
- Five different sketches and at least two elaborations.
- Four different sketches and at least two characterizations.
- Four different sketches and at least four elaborations.
- Four different sketches, at least one characterization and at least two elaborations.

The average percent of boxes with responses that were scorable ranged from 89 for 17-year-olds to 96 for 9-year-olds. Because this is counter to all other scores in this assessment, it is worthwhile to also consider the figures for the average elaboration of student sketches (see Table 6-5).

TABLE 6-5. Scorable and Elaboration, Six Sketches, 1978-79

	Age 9	Age 13	Age 17
Average box scorable	96%	93%	89%
Average box elaboration	6	7	10

It appears that 9-year-olds are better able to generate materials for six rectangles within seven minutes than are older students. An obvious explanation for this phenomenon is that younger learners are less apt to be caught up in producing the elaboration that older students require. This interpretation is supported by the figures for elaboration.

Overall results for fluency followed the pattern for scorable (see Table 6-6). In 1978-79, 86% of the 9-year-olds, 77% of the 13-year-olds and 67% of the 17-year-olds demonstrated fluency. These percentages were higher for 9-year-olds than they were in 1974-75.



TABLE 6-6. Percentages of Students Demonstrating Fluency in Six Sketches Exercise, 1974-75 and 1978-79

Age 9			Age 13			Age 17		
1975	1979	Change	1974	1978	Change	1975	1979	Change
80.8%	86.4%	5.6%*	74.1%	76.9%	2.7%	63.8%	67.2%	3.4%

*Significant at the .05 level.

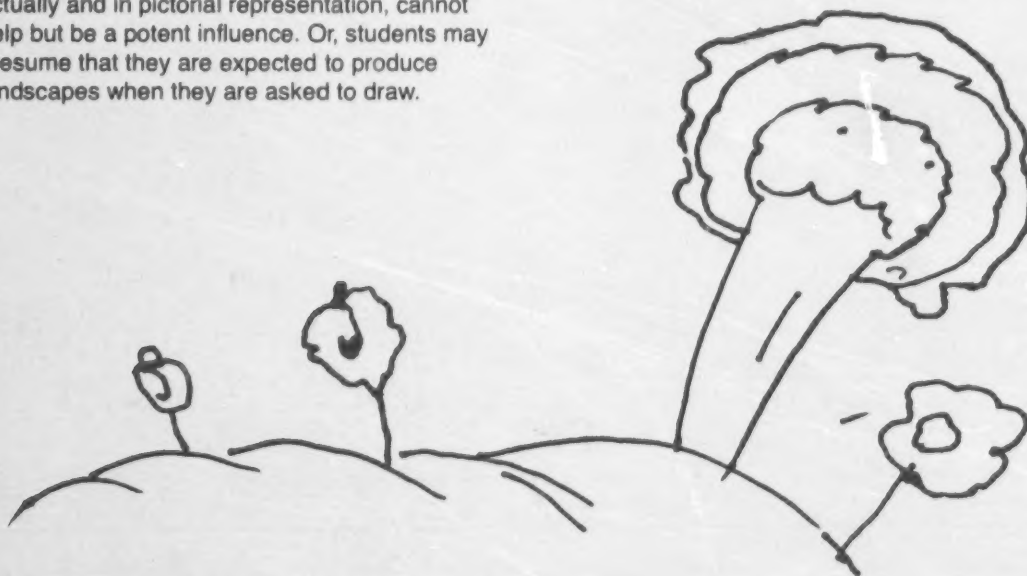
Figures may not total exactly due to rounding or % not responding.

What do they draw when given this kind of task? The most frequent kind of sketch was a landscape, cityscape or seascape and older students were more likely to include these than the younger students. Human figures—in whole or in part—appeared in about 10% of the teenagers' drawings and about 15% of the 9-year-olds' drawings. Appendix Table C-1 presents percentages of sketches displaying various objects and themes.

It is difficult to know what these findings tell us about students' drawing preferences, except that the constant exposure to landscape, both actually and in pictorial representation, cannot help but be a potent influence. Or, students may presume that they are expected to produce landscapes when they are asked to draw.

Producing a Commercial Design

In addition to developing fluency and productive responses to open-ended situations, art educators also seek to nurture skills for responding to a particular assignment. This reflects a long tradition of artists creating in response to specific commissions from clients. The commercial artists of the past, including such illustrious figures as Michelangelo, Rembrandt and de Goya, have their counterparts today in our industrial, fashion and product designers.



To assess 13- and 17-year-olds' skill in producing works of art with a particular subject matter, students were allotted approximately eight and one-half to nine minutes to respond (as package designers might) to the following directions.

There is a new breakfast food called "Big B." It is said to be highly nutritious and to contain many healthful vitamins. You are a package designer and have been asked by the company to design the box which will contain "Big B." The company wants the box to be really exciting so that people will notice it on the grocery shelves, but the company also wants people to know "Big B" is a breakfast food that is good for them. Your task is to make a drawing which shows your design for the box. Draw your design in the box shown on the next page.

Student responses were evaluated in relation to 14 different characteristics detailed in Appendix D.

To be classified as acceptable, designs for "Big B" had to include the product name, at least one indication of being a design for breakfast food or that it was nutritious, and had to be either a coherent or vivid design or both. In addition, acceptable designs had to have:

- Two instances of either "B" being designed, other letters being designed, the image contributing to the message, or a novel image.
- Or, one instance of either "B" being designed, other letters being designed, the image contributing to the message, a novel image, and at least one instance of designing either letter case, letter space and word space.

Over 99% of all students were able to produce a design which could be rated. To form a picture of the nature of the response to this commercial design exercise, 15 of the variables assessed are considered in Table 6-7.



TABLE 6-7. Percentages of Acceptable Responses, "Big B" Box Design, 1974-75, 1978-79

	Age 13			Age 17		
	1974	1978	Change	1975	1979	Change
Overall acceptable design	28.1%	22.1%	-6.0%*	31.6%	29.5%	-2.1%
Letter case consistent	42.6	39.7	-2.9	39.1	41.3	2.3
Letter spacing consistent	21.4	17.0	-4.4*	26.6	18.4	-8.2*
Word spacing consistent	18.4	16.7	-1.7	25.8	23.4	-2.4
Letter "B" design	53.3	48.0	-5.3*	61.0	54.9	-6.1*
Other letter design	47.9	43.4	-4.5*	50.3	44.0	-6.3*
Includes a nongeometric nonverbal image	79.3	79.1	-0.2	76.3	73.3	-3.0
Includes only a geometric nonverbal image	13.2	13.2	0.0	13.4	16.3	2.9*
Image contributes to message	71.8	72.0	0.1	68.1	64.5	-3.6
Image is novel or clever	8.6	7.3	-1.4	10.4	9.0	-1.3
Design is coherent	17.2	13.3	-3.9*	22.9	19.5	-3.4*
Design is vivid	23.0	19.5	-3.6*	23.8	25.6	1.9
Includes product name	97.4	97.5	0.2	98.4	97.4	-0.9
Indicates the product is a breakfast food	77.1	82.8	5.7*	74.5	80.3	5.8*
Indicates the product is nutritious	86.0	83.5	-2.5	85.3	86.0	0.7

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Most 13- and 17-year-olds are clearly capable of producing a box design which incorporates relevant information. They are not as capable, however, of producing a coherent and vivid organization of their ideas. As would be expected, even fewer include a novel image in their design. The ability to letter consistently fares somewhat better, perhaps because of greater experience in forming letters as opposed to a more limited experience in attempting to design or learning to design for a specific situation.

While there are significant increases in the ability to indicate a breakfast food in their designs, 13-year-old students appear to have declined generally in their overall designing skills. To determine if this trend has also carried over among students who have had broader art experiences, the following data need to be considered (see Table 6-8).

TABLE 6-8. Percentages of Overall Acceptable Responses "Big B" Box Design, 1974-75, 1976-79

	Age 13 1974	1976	Change	Age 17 1975	1979	Change
All students	28.1%	22.1%	-6.0%*	31.6%	29.5%	-2.1%
Visit art museums 5 or more times	31.7	23.9	-7.8*	37.5	34.8	-2.7
Taking 1 art class	26.3	21.1	-5.2*	25.7	24.9	-0.8
Taking 2-3 art classes	31.9	25.4	-6.5*	32.0	31.1	-0.9
Taking 4-6 art classes				50.1	47.1	-3.0

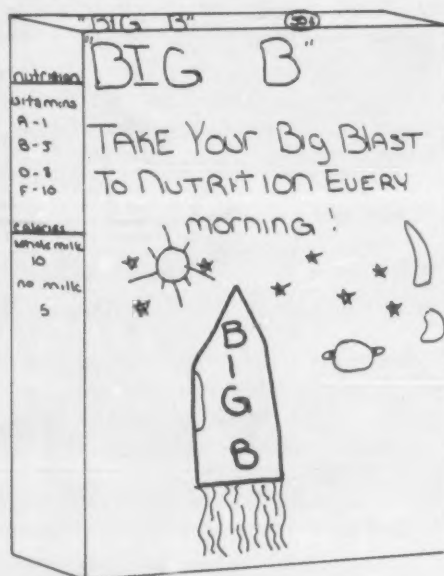
*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.

Although additional exposure to art and art education experiences may be related to student abilities to design effectively, these relationships appear to be weaker than they are for the other production exercises. There is an age 13 decline in the overall ability to design a package for these groups, which corresponds to the decline demonstrated by all 13-year-olds. This decline may be attributed to a continuing de-emphasis upon activities which are art career oriented, a problem of recent concern to the art education establishment.¹

Creating an Expressive Form

Art is a language of expression and communication that serves as a vehicle for transmitting emotion. By becoming art educated, we learn how to express our emotions in constructive and appealing ways. We also become more sensitive to the emotions expressed by others.



¹In 1979, the National Art Education Association launched a major program in art career education that included the sponsorship of four regional conferences, the publication of a handbook and the production of three monographs on various approaches to implementing art career education curricula.

To assess student skills in producing works of art that have a particular expressive content, students were given 2 minutes and 40 seconds to respond to the following directive.

Sometimes when a person is angry his whole body as well as his face shows how angry he is. In the space on the next page, draw a person who is very angry. Try to make the whole body show that the person is angry.

Appendix E explains how the drawings were scored and provides a sampling of rated students' responses.

A successful drawing of an angry person had to display either a complete figure or upper body and head, and one of the following groupings of items:

1. Have eyes, eyebrows and mouth showing anger and at least two body features showing anger.
2. Have eyes, eyebrows and mouth showing anger, one body feature showing anger and at least one device showing anger.
3. Have two of either eyes, eyebrows or mouth showing anger, at least one other head feature (hair, wrinkles, etc.) and at least two body features showing anger.
4. Have two of either eyes, eyebrows and mouth; at least one other head feature (hair, wrinkles, nose, jaw, face and other head); one body feature; and at least one device showing anger.
5. Have two of either eyes, eyebrows and mouth; at least two body features; and at least one device showing anger.
6. Have two of either eyes, eyebrows and mouth; one body feature; and at least two devices showing anger.



Almost 100% of the students' responses were ratable. Seventy-five percent or more were drawings of the complete figure. Approximately 19% and 29% used facial wrinkles to show anger; 36% and 44% employed eyebrows (age 13 and age 17, respectively). The facial feature used most to show anger was the mouth, produced by 86% and 82% of the students (age 13 and age 17). Slightly under 50% of both age groups employed each of the fists and arms categories to show anger, with other responses spread over a wide range of facial and body patterns.

For ages 13 and 17, respectively, 93% and 92% of the students used at least one facial feature to show anger; at least two facial features were

used by 61% and 69%; three features by 26% and 36%; and four or more features were employed in 8% and 14% of the responses.

At both ages the percentages utilizing at least one body part to show anger appeared in approximately 75% of the responses; two parts appeared in about 40%; at least three appeared in 10% or fewer responses; and four parts were used by about 1%.

Not many students used devices to help show anger and almost none of them used expressive lines in their drawings. The overall acceptable levels of performance are low on this exercise (Table 6-9).

TABLE 6-9. Percentages of Acceptable Responses on "Angry Person" Exercise, 1974-75, 1978-79

	Age 13 1974	1978	Change	Age 17 1975	1979	Change
Overall acceptable responses	13.2%	14.6%	1.4%	15.6%	19.1%	3.3%
Number of expressive devices used						
0	72.3	72.3	0.0	76.7	74.2	-2.5
1	17.5	18.1	0.6	15.3	16.9	1.7
2	7.1	6.1	-0.9	5.0	5.3	0.3
3 or more	2.7	2.8	0.1	1.6	2.3	0.7
Drawing has expressive line quality	1.8	1.6	-0.2	3.2	3.0	-0.2

*Significant at the .05 level.

Figures may not total exactly due to rounding or % not responding.





When comparing responses of students who have had no art experiences with those who have had one and those who have had four or more art classes, there is virtually no difference in the production of expressive line quality. In 1978-79, students aged 17 who had taken four or more art classes did not perform significantly better than the nation in overall performance for this exercise; however, in 1974-75, they did better by about 9%.

Apparently, the necessity to develop in any systematic way the skills required to express conceptions of emotions has received very little attention generally or even within specialized art classes. Project-oriented classes and curricula which focus on applied design activities frequently leave little time for investigating why and how art functions as a transmitter of emotions. One must question to what extent art educators number developing abilities to produce works that contain expressive content among their top priorities.

Learning To Produce Art: Summary

The two national assessments in art (1974-75, 1978-79) utilized, between them, eight design and drawing exercises to estimate the extent to which children and youth have acquired abilities to produce artworks. The results are suggestive enough to provide at least impressionistic answers to two major questions (*Design and Drawing Skills*, 1977).

What Is the Level of Designing Skill?

The exercises in which students created designs for a bedroom wall (first assessment), necklace and cereal box tested skill in producing works of art that would reflect one's sensitivity to a given space and function, and skill for inventing relevant and aesthetic images. If acceptable performances for each age level on these design exercises are grouped together



(see Table 6-10), we find a successful performance range of from 4% to 40% for 9-year-olds in 1975, from 13% to 55% for 13-year-olds in 1974 and from 16% to 61% for 17-year-old in 1975. Obviously, the kind of task involved has much to do with success in producing functional, aesthetic and imaginative designs.

TABLE 6-10. Percentages of Acceptable Responses to Drawing and Design Exercises, 1974-75 and 1978-79

	Age 9 1975	1979	Age 13 1974	1978	Age 17 1975	1979
Design bedroom wall	39.9%	—	54.9%	—	61.2%	—
Design unusual necklace	3.9	2.4%	12.7	13.7%	16.1	19.7%
Design cereal box	—	—	28.1	22.1	31.6	29.5
Draw children on playground (perspective)	42.6	—	—	—	—	—
Draw running person	20.7	—	38.3	—	—	—
Draw table with 4 people (perspective)	22.9	—	41.9	—	50.9	—
Draw angry person	—	—	13.2	14.6	15.8	19.1

What is the Level of Drawing Skill?

Exercises requiring students to draw four people seated at a table, children on a playground, a person running and an angry person tested abilities to represent space, animation and emotions both aesthetically and imaginatively. The ranges of performance were from 21% to 43% for 9-year-olds, from 13% to 42% for 13-year-olds (on a different set of exercises) and from 16% to 51% for 17-year-olds.

It would be convenient if we could average these performance ranges to come up with a single percentage of students at each age who possess design and drawing skills. But we cannot. The exercises were discrete tasks. However, the ranges suggest that design skills improve somewhat more with age and instruction than do drawing skills. And the ranges show that the majority of students do not appear to draw or design particularly well. This conclusion is not at all unexpected. If American

schools had made a major commitment to the art education of children and youth, and if sequential and cumulative art curricula were provided in our elementary schools, and if art was a required subject for study throughout the secondary school, serious doubts could be raised about the value of art education practices. But such is not the case. We now know what the level of design and drawing skills is during a period in which little priority has been given to art instruction. If, at some later period, a concerted effort is made to improve visual literacy and enable more students to express ideas and feelings aesthetically, the level of these skills could fairly be expected to rise.



Appendix A

Art Objectives

I. PERCEIVE AND RESPOND TO ASPECTS OF ART

Aspects of art are defined as: sensory qualities of color, line, shape and texture; compositional elements such as structure, space, design, balance, movement, placement, closure, contrast, and pattern; expressive qualities such as mood, feeling, and emotion; subject matter, including (1) objects, themes (the general subject of a work, i.e., landscape or battle scene), events, and ideas (general presymbolic meanings) and (2) symbols and allegories; and expressive content, which is a unique fusion of the foregoing aspects.

A. Recognize and describe the subject matter elements of works of art.

Age 9

1. Identify the objects in specific representational works of art.
2. Describe how the treatment of objects in two or more specific representational works of art is similar or different.
3. Identify themes of specific works of art.
4. Identify events depicted in specific works of art.
5. Describe how the themes of two or more specific works of art are similar or different.
6. Describe the main idea presented in a specific work of art.

Age 13 (in addition to age 9)

1. Identify some of the conventional symbols commonly depicted in works of art.
2. Translate the meaning of conventional symbols commonly depicted in works of art.

Ages 17, A (in addition to age 13)

1. Describe how the treatment of the theme or idea of two or more works of art is similar or different.
2. Identify objects that have two or more meanings in works of art.
3. Interpret the levels of meaning of objects in works of art.
4. Identify allegories depicted in works of art.
5. Interpret the meaning of allegories.

B. Go beyond the recognition of subject matter to the perception and description of formal qualities and expressive content (the combined effect of the subject matter and the specific visual form that characterizes a particular work of art).

Age 9

1. Describe the characteristics of sensory qualities of works of art (that is, tell about colors, shapes, lines, and textures in a painting, building, photograph, etc).
2. Describe the differences between sensory qualities of two or more works of art.
3. Describe the expressive character (feelings and moods) of works of art.

Age 13 (in addition to age 9)

1. Select from a group of works those that show such things as the most movement, stability, simplicity, complexity, etc.
2. Select works that are similar or different in expressive character.
3. Diagram the major compositional features of works of art.
4. Select works that are similar or different in composition.

5. Describe the major compositional features of works of art.

Ages 17, A (in addition to age 13)

1. Describe the differences in expressive character among works of art.
2. Describe how the sensory elements combine to give a work of art a particular expressive quality.
3. Describe how compositional features contribute to a work's expressive quality.
4. Describe how the formal and subject matter aspects function together to give a work of art its own expressive content.
5. Describe the similarities and differences in expressive content of two or more works of art.

II. VALUE ART AS AN IMPORTANT REALM OF HUMAN EXPERIENCE

A. *Be affectively oriented toward art.*

All Ages

1. Be openly expectant of enjoyment and enjoy experiencing works of art.
2. Consider it important to experience works of art.
3. Be emotionally responsive to the impact of works of art.

B. *Participate in activities related to art.*

Age 9

1. Visit art museums and attend exhibitions.
2. Visit school art displays.
3. Look at art in magazines and books.
4. Observe aesthetic objects in natural and man-made environments.

Age 13 (in addition to age 9)

1. Read about art.
2. Buy art books and reproductions.
3. Produce art during leisure time.

Ages 17, A (in addition to age 13)

1. Buy original works of art.
2. Travel locally and abroad with emphasis on seeing art.
3. Belong to art organizations and support art financially.

C. *Express reasonably sophisticated conceptions about and positive attitudes toward art and artists.*

Age 9

1. Express positive attitudes toward art.
2. Express positive attitudes toward the roles of the visual arts in our society.
3. Have empathy with artists.
4. Have some knowledge of the roles of the visual arts in our society.

Ages 13, 17, A (in addition to age 9)

1. Describe the differences between handcrafted and manufactured objects.
2. Describe the differences between works of art and natural objects.
3. Accept sophisticated rather than naive conceptions of art.

D. *Demonstrate an open-mindedness toward different forms and styles of art.*

All Ages

1. Agree that art should exist in a variety of forms.
2. Agree that art should exist in a variety of styles.

E. *Demonstrate an open-mindedness toward artistic experimentation.*

All Ages

1. Agree that artists should experiment in various ways.
2. Agree that artists should explore the possibilities of various media.

III. PRODUCE WORKS OF ART

A. Produce original and imaginative works of art.

All Ages

1. Produce an imaginative work of art, such as an animal or other object that looks like no other object has looked before.
2. Given various forms or objects, invent new forms.

B. Express visual ideas fluently.

All Ages

1. Be fluent in generating ideas for works of art.
2. Be fluent in producing visual ideas.
3. Be fluent in the use of media.
4. Be fluent in composing visually.

C. Produce works of art with a particular composition, subject matter, expressive character, or expressive content.

Age 9

1. Produce a work of art that fulfills the intrinsic demands of a space or shape.
2. Produce a work of art containing specified subject matter.
3. Produce a work of art with a particular mood, feeling, or expressive character.

Age 13 (in addition to age 9)

1. Produce a work of art with a particular mood, feeling, or expressive character.
 - a. Produce a work that fits the mood of a poem or piece of music.
 - b. Produce a work that shows a mood such as calmness, excitement, gaiety, or sadness.
 - c. Produce a work (landscape, city, or town) that has a particular feeling such as coolness, loneliness, warmth, wetness, or spookiness.
2. Produce a work of art with meaning based on the use of established symbols.

3. Produce a work of art with meaning based on the use of new symbols.
4. Design a poster that advertises an event, product, etc.
5. Produce a work that has a particular type of order or variety.
6. Modify the form of an object to improve its aesthetic quality or functional character.

Ages 17, A (in addition to age 13)

Produce a work of art that has a particular composition such as vertical, horizontal, diagonal, concentric, symmetrical, and asymmetrical; that uses deep or shallow space; or that has an open or closed composition.

D. Produce works of art that contain various visual conceptions.

Age 9

1. Demonstrate the ability to represent spatial conceptions (one person standing in front of another, something close and something far, a street and a building, etc.)
2. Demonstrate the ability to represent accurately (depict the essential attitude and position of a model and indicate such things as clothing patterns).
3. Produce an accurate reportage drawing.
4. Produce works in which the subject-matter aspects indicate expressions and emotions (running, walking, falling, laughing, crying, anger, fright, happiness, etc.).

Ages 13, 17, A (in addition to Age 9)

Demonstrate the ability to represent an object from different viewpoints and under different light conditions.

E. Demonstrate knowledge and application of media, tools, techniques, and forming processes.

Age 9
(None)

Ages 13, 17, A

1. Perform processes such as coiling a pot, cutting and printing a linoleum block, mixing specific colors, etc.
2. Select the appropriate tools to accomplish certain tasks such as printmaking, clay modeling, etc.

IV. KNOW ABOUT ART

A. *Recognize major figures and works in the history of art and understand their significance. (Significance as it is used here refers to such things as works of art that began new styles, markedly influenced subsequent works, changed the direction of art, contained visual and technical discoveries, expressed particularly well the spirit of their age, and those considered to be the major works of major artists.)*

Age 9

1. Recognize well-known works of art.
2. Tell why well-known works of art are important or significant.
3. Name the artist who produced specific works of art.

Age 13 (in addition to age 9)

Select the statement that best characterizes the significance of a work of art.

Ages 17, A (in addition to age 13)

Explain why certain key works are considered to be important to the history of art.

B. *Recognize styles of art, understand the concept of style, and analyze works of art on the basis of style.*

Age 9

1. From a group select works of art of the same style.
2. Explain why two or more works of art are similar or different in style.

Age 13 (in addition to age 9)

Answer questions about the concept of style.

Ages 17, A (in addition to age 13)

1. Answer questions about the characteristics of specific styles.
2. Describe the common characteristics of works of art of the same style.

C. *Know the history of man's art activity and understand the relation of one style or period to other styles and periods.*

Age 9

1. Rank works of art (2 to 10 or to 12) in chronological order.
2. Place works of art in the time period in which they were produced.

Age 13 (in addition to age 9)

1. Place works of art along a time line.
2. Identify the historical period during which works of art were produced.
3. Select the style name that most closely characterizes a work of art.
4. Explain why particular visual, conceptual, technological, and cultural advances had to occur before a certain work of art could be produced.

Ages 17, A (in addition to age 13)

1. Recognize and understand similarities and differences in media, forming processes, tools, and techniques.
 - a. Select the works in which similar media, tools, techniques, and forming processes were employed.
 - b. Describe the media, tools, techniques, and forming processes employed in producing particular works, and explain the advancements that preceded their use.
2. Infer why one work of art comes from a technologically more highly developed society than another.
3. Identify what important visual or expressive aspect is evidenced in a particular work of art that is not evidenced in other works that preceded it.

4. Select the most accurate statement about the culture which produced a particular work of art.
5. Select the most accurate statement about the functions of particular works of art.
6. Identify works of art that originated in particular cultures.
7. Match a description of a culture with a representative work of art of the same culture.
8. Infer the characteristics of a society that produced a particular work of art.
9. Identify a style of art that may have influenced specific subsequent styles.

D. Distinguish between factors of a work of art that relate principally to the personal style of the artist and factors that relate to the stylistic period or the entire age.

Age 9
(None)

Age 13

1. From a group of works of art of the same period, select those that were produced by one artist.
2. From a group of works of art of various periods, select those that were produced during the same period.

Ages 17, A (in addition to age 13)

1. Select statements that most accurately characterize the similarities or differences between two works of art by different artists of the same style or period.
2. Describe the similarities or differences between two works of art of the same style but produced by two different artists.
3. When presented with two works of art of the same style, but by two different artists, characterize the differences that might relate to the personality of the artist.

E. Know and recognize the relationships that existed between art and other disciplines of the humanities (literature, music, and particularly the history of ideas and philosophy) during a given period.

Age 9
(None)

Age 13

1. Select the work of art that was produced during the same period as a piece of literature, poetry, or music.
2. Select works of art that were produced by societies holding particular ideas, philosophies, or religious beliefs.

Ages 17, A (in addition to age 13)

Make inferences about the different natures of cultures based on groups of works of art from those cultures (such as from open and closed cultures and from highly developed and developing cultures).

V. MAKE AND JUSTIFY JUDGMENTS ABOUT THE AESTHETIC MERIT AND QUALITY OF WORKS OF ART

Statements of aesthetic quality are those that characterize the various aspects of a work of art, while statements of aesthetic merit are assertions about the degree of goodness or badness of the work. Justifications of aesthetic merit are based on criteria such as the degree to which the work is integrated and whether contact with the work results in a vivid and fused experience.

A. Make and justify judgments about aesthetic merit.

All Ages

1. Judge a work of art to be good or bad.
2. Give reasons why a work of art has or does not have aesthetic merit.

B. Make and justify judgments about aesthetic quality.

All Ages

1. Characterize the aesthetic quality of works of art.

2. Give reasons why a work of art has a particular aesthetic quality.

C. Apply specific criteria in judging works of art.

Age 9

1. Judge a work of art on the basis of whether its organization leads to feelings of pleasure or displeasure.
2. Judge a work of art on the basis of how well its various aspects relate to each other.

Age 13 (in addition to age 9)

1. Judge a work of art on the basis of how well it creates a vivid and intense impression.
2. Judge a work of art on the basis of how well the artist has utilized the inherent qualities of a particular medium.
3. Judge a work of art on the basis of how well the artist has controlled his medium.
4. Judge a utilitarian object, an advertisement, or a building on the basis of how well it functions or fits a context.

Ages 17, A (in addition to age 13)

Judge a work of art on the basis of how successfully it expresses aspects of the society in which it was produced.

D. Know and understand criteria for making aesthetic judgments.

Ages 9, 13

1. Discriminate among statements containing adequate judgmental criteria and those containing inadequate criteria.
2. Give adequate reasons for stating that any work of art has aesthetic merit.

Ages 17, A (in addition to ages 9 and 13)

1. Explain why two or more works of art, although very different in appearance, are often judged to be of essentially the same aesthetic worth.
2. Explain why two or more works of art with essentially the same subject matter are often judged to be of very different aesthetic worth.
3. Describe personal biases that, although almost entirely unrelated to aesthetic quality, affect judgments of works of art.

Appendix B

Scoring Criteria for Necklace Exercise

Each necklace drawing was coded for the following characteristics:

Functionality of the necklace

- Position: Could the necklace actually hang on the neck in this position?
- Roundness: Does the necklace appear to follow body contours?
- Partial roundness: Does a major portion of the necklace conform to body shape while the total necklace does not? (Yes was automatically assigned to partial roundness if a yes was assigned to roundness.)

Integrating the necklace, i.e., the way the elements of the necklace cohere and the way the necklace functions within the neck and upper chest format.

- Coherence (consistency): Does the piece have three elements that function together coherently?
- Necklace fits space: Does the piece fit comfortably within the neck and upper chest area?

Imaginativeness of the necklace

- Unusual objects: Does the necklace contain one or more unusual objects or forms?
- Novel combination: Does the necklace contain objects or forms combined in a novel or unusual manner?

The following examples illustrate the scoring.



Position:	Yes	Coherence:	Yes
Roundness:	Yes	Fits space:	Yes
Partial roundness:	Yes	Unusual objects:	No
Novel combination: No			



Position:	Yes	Coherence:	Yes
Roundness:	Yes	Fits space:	Yes
Partial roundness:	Yes	Unusual objects:	No
Novel combination: No			



Position:	No	Coherence:	No
Roundness:	No	Fits space:	No
Partial roundness:	No	Unusual objects:	Yes
Novel combination: No			



Position:	No	Coherence:	No
Roundness:	Yes	Fits space:	No
Partial roundness:	Yes	Unusual objects:	Yes
Novel combination: No			



Position:	No	Coherence:	Yes
Roundness:	No	Fits space:	Yes
Partial roundness:	Yes	Unusual objects:	No
Novel combination: Yes			



Position:	No	Coherence:	No
Roundness:	Yes	Fits space:	No
Partial roundness:	Yes	Unusual objects:	No
Novel combination: Yes			

Appendix C

Scoring Criteria for Six Sketches Exercise

General

This exercise assesses performance on art objective III. Specifically it deals with subobjective B1—Be fluent in generating ideas for works of art, and B2—Be fluent in producing visual ideas.

In scoring the exercise, three main factors are taken into account:

1. The number of different ideas presented.
2. The complexity of each idea (specifically, does a sketch contain a single isolated object or two or more unrelated objects, or two or more related objects).
3. The elaboration of ideas by means such as ornamentation, shading, texture and motion.

In addition, each sketch is categorized according to:

1. The type of object or theme depicted.
2. The classification of objects and themes according to their character such as humorous, inventive and facile.

Finally, the scorer determines whether each sketch presents an idea different enough from the others to merit a score of "different."

1. Each sketch was scored for:

Scorability

- 0 = No response (blank drawing space)
(No further scoring)
- 1 = Scorable
- 7 = Not scorable (apparently random, unconnected lines) (No further scoring)

Content

- 1 = Single object
- 2 = Two or more objects unconnected and unrelated (two related shapes such as a square and a circle *cannot* be scored in this category—they must be scored under "non-objective theme.")
- 3 = Theme (that is, two or more related or connected objects, including two objects connected by the same imaginary ground line such as a table and chair.)

Elaboration

Elaboration is going beyond the basic structure and components of objects or shapes to show such things as contrast of light and dark, shading, highlights, shadows, textures, patterns, motion, space, volume, and elaborate details within basic structures.

- 1 = Yes, elaboration is present
- 2 = No, elaboration is not present

Object Categorization

There are 14 categories, marked as 1 through 14. If a drawing has been classified as either a "single object" or "two or more unrelated objects" then each object is categorized into 1 of the 14 categories. For a single object, only 1 of the 14 categories will be filled in. If there are two or more objects and the objects are in different categories, then each of the appropriate categories will be marked.

- 1 = Human figure
- 2 = Human head
- 3 = Human body part
- 4 = Animal/animal body part
- 5 = Plant/flower, tree
- 6 = Fruit, vegetable
- 7 = Building/structure/non-vehicular
- 8 = Car, truck/land vehicle
- 9 = Airplane
- 10 = Boat
- 11 = Nonobjective shape
- 12 = Word, label, letter
- 13 = Miscellaneous (common)
- 14 = Ambiguous/other

Theme Categorization

- 1 = Landscape/skyscape
- 2 = Cityscape
- 3 = Seascape
- 4 = Animals
- 5 = Religious, historical
- 6 = Fantasy, science fiction
- 7 = Domestic, genre
- 8 = Sports
- 9 = Human figure, human body parts
- 10 = Still-life, interior
- 11 = Nonobjective
- 12 = War, battles
- 13 = Vehicular theme—air/land/water
- 14 = Other/poster/drama/misc./ambiguous

Character Categorization

Each drawing, regardless of whether it is an object or a theme, was scored for the presence or absence of certain characteristics. These characteristics are:

Inventive
Cartoon/monstrous
Message
Sexual
Humorous
Conflict
Blank
Facile
Scribble drawing

2. The overall exercise, all sketches as a group, was scored for:

Ratability

- 0 = No response to all parts, all drawing boxes blank
- 1 = Ratable
- 7 = Stray or random marks with no attempt to respond
- 8 = Drew something other than what was requested. This is unlikely to be used for 6 sketches
- 9 = Wrote in "I don't know."

Sensitivity

- 1 = Sensitive
- 2 = Not sensitive

An exercise is sensitive if responses to it contain information that would make it impossible to use as an example response for reporting or in other dissemination. Sensitivity usually means that the respondent signed his name on the drawing. If the respondent only signed his work with a first name or initials, it is not sensitive. If there are "risqué" drawings involved, they are NOT considered sensitive unless respondent has signed his full name.

Different Sketches

- 1 = All six sketches were different or all sketches drawn were different.
- 2 = At least two sketches were "the same" or not different.

If all six sketches are categorized in different categories of objects or themes, then they are different by definition. However, if two sketches are classified within the same category of object or theme, they may or may not be different from each other in terms of subject matter or content.

Similar Sketches

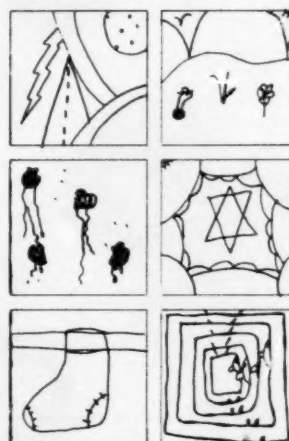
Scorers noted how many of the six sketches were similar.

Following are some sample responses to this exercise.

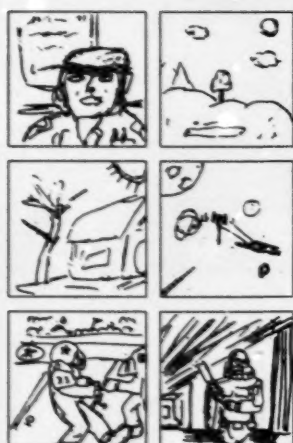
Sample Responses



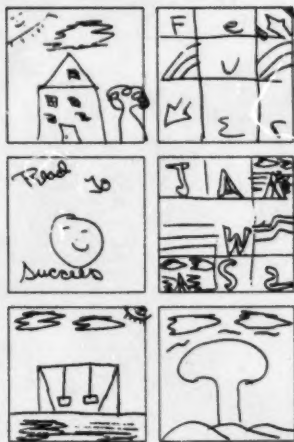
This student drew six different sketches. One consisted of a single object, the rabbit, which did not show elaboration, though it was well drawn. The other five drawings were thematic, representing animal themes (1, 4), a landscape (2), a vehicular theme (5) and a rainbow.



All six of these drawings were judged as thematic. Sketches 1 and 6 represented fantasy themes and included inventive characteristics. Sketch 2 consisted of an animal theme with a humorous character categorization. Non-objective themes were depicted by sketches 3 and 4 and a sock was drawn in sketch 5, a still life.



These six different sketches were also thematic. All except the two landscapes (2, 3) contained elaboration. Sketch 1 consisted of a facilely-drawn human head. Sketches 4 and 6 presented science fiction themes, with sketch 4 portraying conflict and sketch 6 containing more facility of drawing techniques. Sketch 5 contained a sports theme, also rated as a presence of conflict.



Only two different themes are presented in these six thematic sketches. Sketches 1, 5 and 6 consisted of landscapes; sketches 2, 3 and 4 contained a poster-like format with labeling. All of the poster sketches contained messages with inventive characteristics included in sketches 2 and 4.



Of the six different sketches drawn by this student, three were thematic (1, 2 and 3) and three were single objects (4, 5 and 6). Sketch 1 was a drawing of flowers and grass (landscape) and contained elaboration. Sketch 2 consisted of a coat draped over a chair and included elaboration and facility. A still life is shown in sketch 3. The single-object sketches represented a shoe (4), a corn cob (5) and a house (6).

TABLE C-1. Percentages of Sketches in Object and Theme Categories, Age 9, 1979

	Box					
	1	2	3	4	5	6
Content						
Single object	37.6%	38.8%	41.4%	40.7%	40.3%	37.7%
2 or more objects	0.3	0.5	0.6	0.3	0.5	0.5
Theme	61.4	59.3	56.8	46.9	53.1	51.2
Elaboration	4.4	6.1	6.9	5.9	6.7	6.7
Object						
Human figure	8.4	5.7	5.9	5.9	4.7	4.7
Human head	4.0	2.9	3.2	2.5	3.1	2.7
Animal	6.6	6.4	7.6	6.3	6.4	6.3
Land vehicle	2.8	3.5	3.7	3.5	3.2	2.1
Building	3.2	4.4	4.5	3.3	3.7	2.7
Plant/flowers	5.1	5.1	3.6	3.3	3.4	2.1
Nonobjective	2.0	1.8	2.1	3.0	2.0	2.2
Miscellaneous	2.7	5.5	6.6	8.2	10.0	11.0
Theme						
Landscape	30.3	23.4	19.9	16.7	17.0	14.8
Animals	6.2	6.8	5.8	7.0	5.8	6.8
Vehicular	5.6	7.5	6.6	6.6	4.9	5.1
Domestic genre	5.2	5.1	7.1	7.8	6.5	5.9
Sports	1.7	1.4	1.9	2.0	2.0	2.2
Still-life, interior	1.9	2.9	2.9	2.5	3.2	3.4
Human figure	6.1	5.5	5.1	5.7	6.5	5.9
Nonobjective	1.2	1.3	1.5	1.5	1.7	1.7

TABLE C-2. Percentages of Sketches in Object and Theme Categories, Age 13, 1978

	Box					
	1	2	3	4	5	6
Content						
Single object	33.2%	36.1%	35.1%	37.3%	34.2%	30.9%
2 or more objects	0.1	0.1	0.3	0.1	0.2	0.4
Theme	66.3	61.9	63.4	56.1	54.3	46.9
Elaboration	6.4	7.5	7.2	7.1	7.5	7.8
Object						
Human figure	3.3	3.0	2.5	3.1	2.5	2.1
Human head	5.6	6.1	5.3	4.7	4.4	4.3
Animal	5.8	6.4	5.9	5.7	5.5	4.5
Land vehicle	4.4	4.6	3.6	3.5	2.4	1.8
Building	2.3	3.0	3.0	2.9	2.7	1.7
Plant/flowers	4.0	3.5	3.0	3.1	2.6	2.5
Nonobjective	1.8	1.3	1.8	1.8	1.9	2.2
Miscellaneous	3.6	4.4	6.1	7.7	7.7	7.8
Theme						
Landscape	35.1	26.6	24.9	21.7	19.5	14.3
Animals	6.0	6.2	6.4	5.9	5.3	4.4
Vehicular	5.7	6.7	6.9	6.2	6.1	3.6
Domestic genre	3.5	3.3	5.3	3.8	4.9	4.9
Sports	2.3	2.4	3.4	2.3	3.6	3.1
Still-life, interior	4.9	4.0	4.5	4.4	3.5	4.3
Human figure	2.5	4.0	3.4	3.7	3.0	2.4
Nonobjective	1.7	2.8	2.2	2.7	2.9	3.7

TABLE C-3. Percentages of Sketches in Object and Theme Categories, Age 17, 1979

	Box					
	1	2	3	4	5	6
Content						
Single object	23.4%	27.7%	28.2%	29.2%	27.2%	24.2%
2 or more objects	0.1	0.4	0.1	0.3	0.3	0.3
Theme	75.9	69.6	68.9	61.2	55.0	42.5
Elaboration	9.9	10.5	11.2	11.0	8.6	8.4
Object						
Human figure	2.6	2.6	2.2	2.0	2.0	1.6
Human head	2.9	5.5	4.8	4.7	5.0	3.2
Animal	4.5	4.7	4.2	4.5	4.2	3.5
Land vehicle	2.5	2.5	2.5	2.1	2.1	1.8
Building	1.7	1.9	2.7	2.0	1.3	1.3
Plant/flowers	3.0	2.6	2.9	2.2	1.9	1.6
Nonobjective	1.2	1.3	2.1	1.6	2.0	2.6
Miscellaneous	2.6	3.7	4.4	6.5	5.2	5.6
Theme						
Landscape	42.9	30.7	26.4	21.3	19.4	13.8
Animals	4.5	4.7	6.5	4.5	4.9	3.6
Vehicular	5.5	6.5	6.7	5.2	5.0	3.3
Domestic genre	2.9	3.8	4.7	4.8	3.9	3.3
Sports	2.7	2.9	3.8	3.5	3.1	2.8
Still-life, interior	4.6	4.6	5.2	6.0	4.2	3.8
Human figure	2.8	2.7	4.1	3.2	2.8	2.1
Nonobjective	2.7	4.2	4.3	4.7	4.2	4.1

TABLE C-4. Percentages of Sketches in Character Categories, Ages 9, 13 and 17, 1978-79

	Box					
	1	2	3	4	5	6
Inventive						
Age 9	0.0%	0.3%	0.2%	0.0%	0.2%	0.1%
Age 13	0.3	0.2	0.5	0.4	0.2	0.5
Age 17	0.7	0.7	0.6	0.7	0.6	0.6
Cartoon/monstrous						
Age 9	4.0	2.6	2.1	2.7	2.4	2.6
Age 13	3.1	3.2	4.2	3.7	3.5	3.1
Age 17	1.7	2.8	2.7	2.5	2.9	2.2
Message						
Age 9	0.0	0.1	0.4	0.2	0.1	0.4
Age 13	1.1	0.2	0.2	0.2	0.3	0.6
Age 17	0.2	0.4	0.3	0.2	0.2	0.3
Sexual						
Age 9	0.0	0.0	0.0	0.0	0.0	0.0
Age 13	0.0	0.1	0.0	0.1	0.1	0.4
Age 17	0.5	0.5	0.2	0.2	0.2	0.3
Humorous						
Age 9	0.0	0.0	0.0	0.0	0.0	0.0
Age 13	0.0	0.0	0.0	0.1	0.1	0.2
Age 17	0.3	0.1	0.1	0.1	0.3	0.3
Conflict						
Age 9	0.6	0.8	0.5	1.1	1.4	1.2
Age 13	0.6	0.7	0.8	0.8	0.8	1.0
Age 17	0.5	0.6	0.7	0.6	0.7	0.6
Facile						
Age 9	0.2	0.1	0.0	0.0	0.0	0.1
Age 13	0.6	0.1	0.2	0.1	0.1	0.2
Age 17	1.0	1.5	0.8	0.8	0.7	0.5
Scribble drawing						
Age 9	0.0	0.0	0.1	0.0	0.0	0.1
Age 13	0.1	0.1	0.1	0.1	0.1	0.2
Age 17	0.0	0.2	0.1	0.1	0.2	0.0

Appendix D

Scoring Criteria for "Big B" Exercise

Scorers answered each of the following questions with a "yes" or a "no."

1. Was lettering present?
2. Was the lettercase used consistent within each word?
3. Was the letter "B" drawn with any design?
4. Were there letters other than "B" that showed design consideration?
5. Was the letter spacing consistent throughout the front of the box?
6. Was the word spacing consistent throughout the front of the box?

Three characteristics of nonverbal images used in the designs were also scored. They were:

1. Was a nonverbal image used? Images also were categorized as images of objects or as strictly geometric designs.

2. Does the image contribute to the message of the design?
3. Is the image novel or clever?

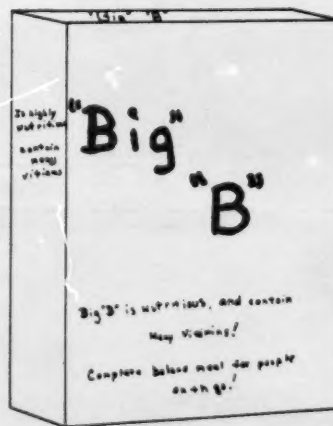
The overall design was scored by coherence and vividness. A coherent design is generally balanced and pleasing to the eye. The vivid designs are eye-catching designs. Finally, the designs were scored for the presence or absence of three pieces of information, which are listed below:

1. Was the name of the product "Big B" included as part of the design?
2. Does the design indicate that the product is a breakfast food?
3. Does the design indicate that the product is nutritious?

Sample Designs



Design 1



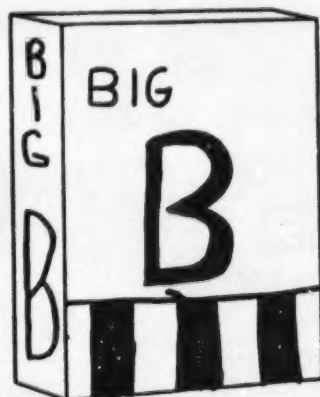
Design 2



Design 3



Design 4



Design 5

Presence or Absence of Scoring Characteristics for Sample Response Designs 1-5, "Big B" Exercise

	Present	Absent
Lettering	Designs 1-5	Designs 1, 2
Lettercase consistency	Designs 3, 4, 5	Design 2
"B" design	Designs 1, 3, 4, 5	Designs 2, 5
Other letter design	Designs 1, 3, 4	Designs 1, 2
Letter spacing consistency	Designs 3, 4, 5	Design 1
Word spacing consistency	Designs 2, 3, 4, 5	Design 2
Nonverbal images	Designs 1, 3, 4, 5	Designs 2, 3, 5
Image contributes to message	Designs 1, 4	Designs 1-5
Novel or clever images		Designs 1, 2, 5
Coherence	Designs 3, 4	Designs 2, 3
Vividness	Designs 1, 4, 5	
Name included	Designs 1-5	
Breakfast food	Designs 1, 4	Designs 2, 3, 5
Nutritious	Designs 1, 2, 4	Designs 3, 5

Appendix E

Scoring Criteria for Angry Person Exercise

Scorers looked for a number of head and body features being used to show anger. The head features were:

1. Hair
2. Wrinkles
3. Eyebrows
4. Eyes
5. Nose
6. Mouth
7. Jaw
8. Other face features
9. Other head features

The body features scored were:

1. Fists
2. Fingers
3. Arms
4. Shoulders
5. Legs
6. Feet
7. Stance
8. Muscle tension

In addition to the above, each drawing was scored for figure completeness; for the presence of up to three or more devices such as weapons, objects being kicked, etc.; and for expressive line and/or shape quality of the drawing.

Sample Responses



This student drew a complete figure of a man. The head features used to convey anger were the hair standing straight out and an open, tense mouth. Angry body features included an upraised arm, a clenched fist and a kicking leg. The movement lines drawn around the fist and foot assisted in showing anger.



This complete figure included many angry head characteristics: wrinkles on the forehead and cheeks; slanted eyebrows drawn in a bold manner; eyes, mouth and overall shading of the face. The heavy pressure made by the side of a pencil placed this response in the expressive category.



A complete figure of a woman was drawn by this student. The eyes were drawn wide open and the mouth is slanted downward at the corners. The raised shoulders and the tense, outstretched arms also contributed to a feeling of anger. A club drawn in the woman's hand was scored as an angry device.



The head features that assisted in showing anger in this drawing are the bold, slanted eyebrows and the squared jaw. The horns contributed to the drawing's message of anger. Body features included the tense, muscled arms and a club/hook arm. The drawing contained two additional devices, smoke coming from the ears and a knife.



The angry figure drawn by this student employed wrinkles around the eyes, slanted eyebrows and a jagged mouth. The arms are outstretched and a stamping movement of the feet contributed to a portrayal of anger. The word "siam" was rated as an angry device.



In this drawing, the hair stands straight out from the head in a clear and definite manner. The bold, sloping eyebrows and the mouth with clenched teeth display anger. The student drew upraised arms and clenched fists to assist with the angry message. The stance of the figure is drawn effectively, with legs spread apart and feet planted firmly on the ground.

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